



Wireless 802.11g Palm Server Router

User Manual



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Warranty

One-Year Warranty is provided for consumer products. This warranty is subject to the conditions and limitations set forth herein.

("We") warrants and tests the Product to be free from defects in material and workmanship and to conform to published specifications. During the warranty period, should the Product fail under normal use in the recommended environment due to improper workmanship or materials, we will repair the Product or replace it with a comparable one.

This warranty is for a specific period of time from the date of purchase. Proof of date of purchase is required. We will inspect the Product and make the decision regarding repair or replacement. We reserve the right to provide a functionally equivalent refurbished replacement Product.

This warranty does not apply to Product failure due to accident, abuse, mishandling, improper installation, alteration, improper usage, or problems with electrical power. The Product must be used with devices that conform to the recommended industry standards. We will not be liable for damages resulting from a third party device that causes the Product to fail. We shall in no event be liable for any consequential, indirect, or incidental damages, lost profits, lost business investments, lost goodwill, or interference with business relationships as a result of lost data. We are also not responsible for damage or failure of any third party equipment, even if we have been advised of the possibility. This limitation does not apply to the extent that it is illegal or unenforceable under applicable law.

The limited warranty is exclusive, with no other warranties, implied or statutory, including, but not limited to any implied warranty of merchantability or fitness for a particular purpose. The technical supports or advices we provide do not affect this warranty in any part.

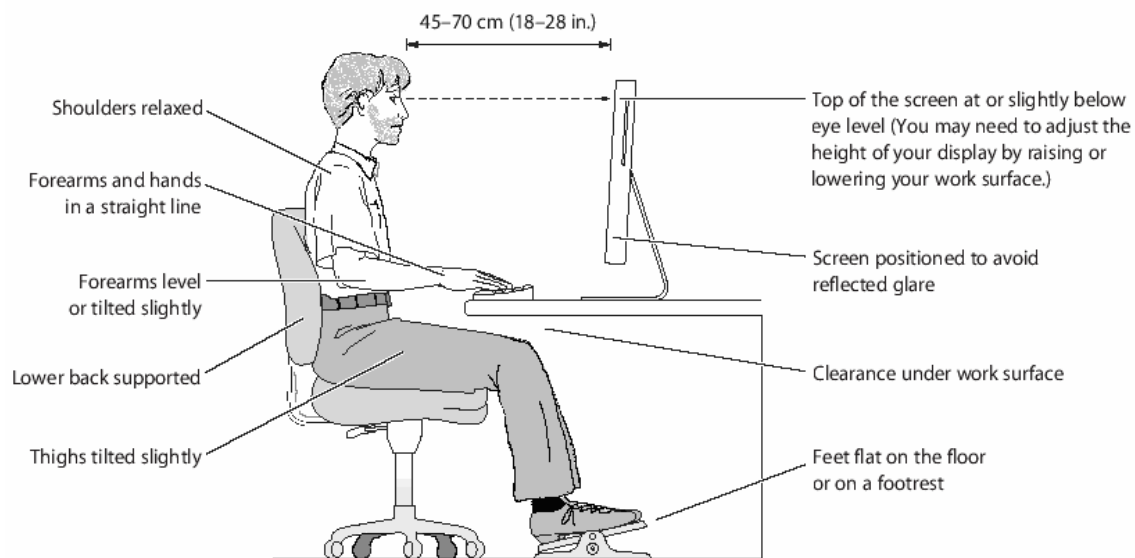
FCC Caution

1. The device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:
 - (1) This device may not cause harmful interference, and this device must accept any interference received, including interference that may cause undesired operation.
2. FCC RF Radiation Exposure Statement: The equipment complies with FCC RF radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body.
3. This Transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.
4. Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user authority to operate the equipment.

Safe Seating Gestures:

You should follow the manufacturer's instructions for adjusting the backrest to fit your body properly.

- ✚ An adjustable chair that provides firm, comfortable support is best.
- ✚ Adjust the height of the chair so your thighs are horizontal and your feet flat on the floor.
- ✚ The back of the chair should support your lower back (lumbar region).



CE Statement of Conformity

Our product has been tested in typical configuration by Ecam Sertech Corp and was found to comply with the essential requirement of “Council Directive on the Approximation of the Laws of the Member States relating to Electromagnetic Compatibility” (89/336/EEC; 92/31/EEC; 93/68/EEC)

Chapter 1 Introduction

1.1 Overview

The Palm Server Router is a portable and convenient wireless solution for the traveling business person delivering 802.11g wireless connectivity with a maximum wireless signal rate of up to 54Mbps. Use it in conference rooms, hotel rooms, or even at hotspots. The Wireless Pocket Router/AP might be small in size, but is huge in functionality, supporting multiple operation modes, including Access Point (AP) mode, Router mode, and Wireless Client mode. You can switch among these modes easily by using the Palm Server Router's 3-way configuration switch. Moreover, there are 2 USB ports support with the Palm Server Router; user can plug the USB devices including Flash Disk, Web Camera and Printer. Also, monitor your home with a Webcam via the Palm Server Router. Take pictures or video via the Palm Server Router, also can do the monitoring or recording all images into the USB HDD for reviewing. Often marketed as surveillance tools for home or office security, network Webcams are now being employed by early adopters for more personal matters, such as watching kids and monitoring pets. The Webcam can be remotely accessed and controlled via a browser.

1.2 Features

The Palm Server Router's main functions, including Wireless Access, Webcam Monitor, Print Server, FTP Server and IP Sharing are shown as below. These features of the Palm Server Router and their applying instructions in User Manual will not only fulfill your requirements, but also ease your inconvenience from the job.

- **IP Sharing**

The Palm Server Router is an Internet wireless security server appliance, with many functions such as DHCP Server, NAT, IP sharing, Virtual DMZ, Internet firewall, URL Filter, Mac Address Filter.

- **FTP Server**

The Palm Server Router supports FAT32/EXT3 file system format. Plug with USB hard drive or thumb drive, it will become a FTP server, and the users can share files on the Internet.

- **Printer Server**

The Palm Server Router supports USB printer. It allows all computers sharing the printer on your network. With LPR protocol, users can use printer from both WAN and LAN.

- **Webcam Server**

The product support USB Web Camera, which provides easy and affordable solution for home security. It allows users monitoring home from anywhere via online webcam. Also, you might be alerted by an email with an intruder picture.

- **High Speed Wireless LAN**

The Palm Server Router support IEEE 802.11g wireless LAN. It can transmit data up to 54Mbps. It keeps compatibility with existing IEEE 802.11b device and complies with IEEE 802.11b standard. The integrated Wireless Access Point with 64-bit and 128-bit WEP encryption functionality allows the wireless router to link a broadband internet connection to your local network of wireless client securely. It also support WPA, 802.1x for wireless security.

1.3 Specifications

Interface	Three Mode	Router Mode	Connector: 1x RJ-45, 10/100 Base TX for WAN Support : Ethernet 802.3u, 10/100Mbps auto cross-over function.
		AP Mode	Connector: 2x RJ-45, 10/100 Base TX for LAN Support : Ethernet 802.3u, 10/100Mbps auto cross-over function.
		Client Mode	Connector: 1x RJ-45, 10/100 Base TX to PC. Wireless to Access Point. Support : Bridge both Ethernet and wireless automatically.
	WLAN Port	Connector: Wireless Support : IEEE 802.11b/g	
	USB2.0 Port	Connector : 2 x Standard _A type Support : USB Webcam, USB printer, USB Flash/HDD	
	Slide Switch	Router / AP / Client mode exchange function.	
Function	Web-Base	Windows IE / Linux Firefox / MAC Safari	
	WAN Protocol	PPPoE / PPTP / Static IP/ Dynamic IP	
	WLAN	WDS / WEP Key / WPA / WPA-PSK / MAC Access Control /Hidden SSID	
	Routing	UPnP / DHCP / DNS / WINS / DDNS	
	NAT	Virtual Server / Virtual DMZ	
	Firewall	MAC Filter / URL Filter / SPI / DoS Protection / IP Packet Filter	
	QoS	3-level priority for each application port	
	Folder Management	Disk Format	
	User account Management	User account create and access control	
Application	Webcam Server	Webcam view via browser by internet real time Video / Picture monitor from LAN/WAN PC Picture recording to FTP server or USB HDD	
	Printer Server	Printer Via WAN/LAN PC Printer Sharing	
	FTP Server	Anonymous login User login	
Management	Administrator	Quick Setup Wizard / Site Map Setup wizard / General Setup	
	Personal Panel	My Document / My Webcam / My Status	
Others	Dimension	91mm (L) x 80mm (W) x 29mm (H)	
	Power	AC 100 V ~ 240 V	

Notice: Firmware Upgrade available through download.

1.4 System Requirements

To begin with the Palm Server Router, you must have the following minimum system requirements. If your system can't correspond to the following requirements, you might get some unknown troubles on your system.

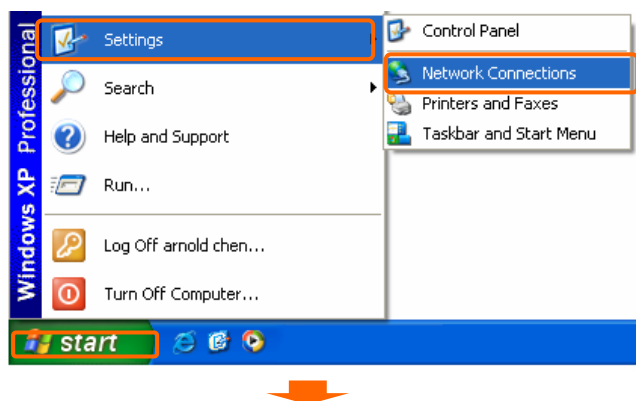
- XDSL/Cable Modem and broadband Internet Account.
- One Ethernet (10 BASE-T or 10/100 BASE-TX) network interface card.
- TCP/IP and at least one web browser software installed (E.g.: Internet Explorer or Netscape).
- At least one 802.11g (54Mbps) or one 802.11b (11Mbps) wireless adapter for wireless mobile clients.
- Recommended OS: Win2000 or WinXP / Linux.

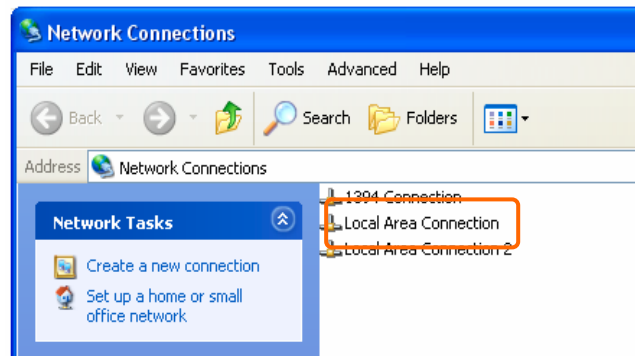
1.5 Get your IP Automatically & Manually

After the Palm Server Router connected with your computer, please make sure your IP is in the automatic IP position or you adjust it manually in order to activate the Internet network from home to Internet. If you don't know how to enter the settings, please follow the steps as below.

【Step1】

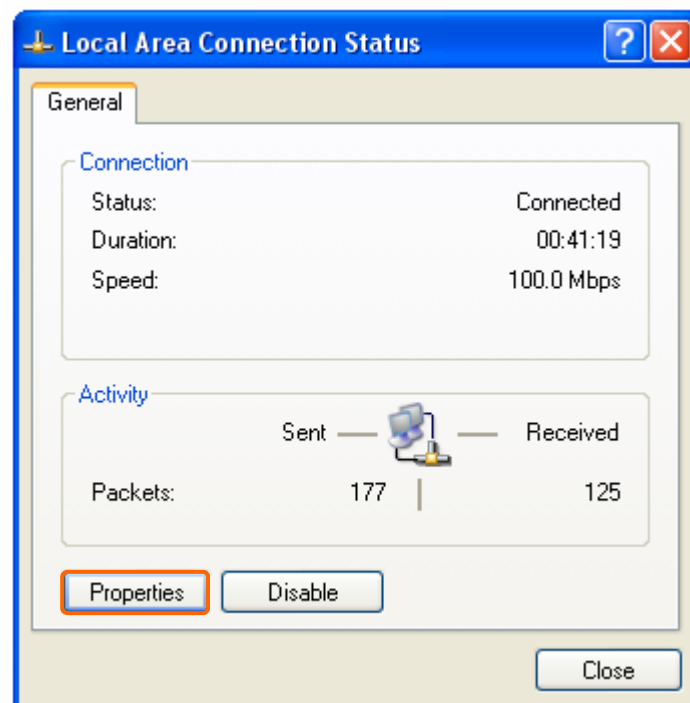
Go to **Start>Settings> Network Connections** and then select **Local Area Connection**.





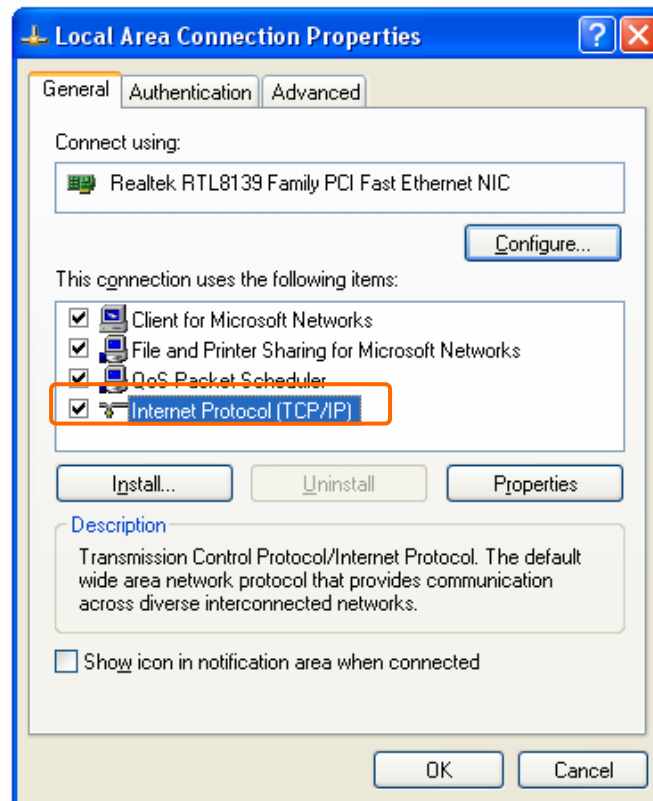
【Step2】

Click on **Properties** button.



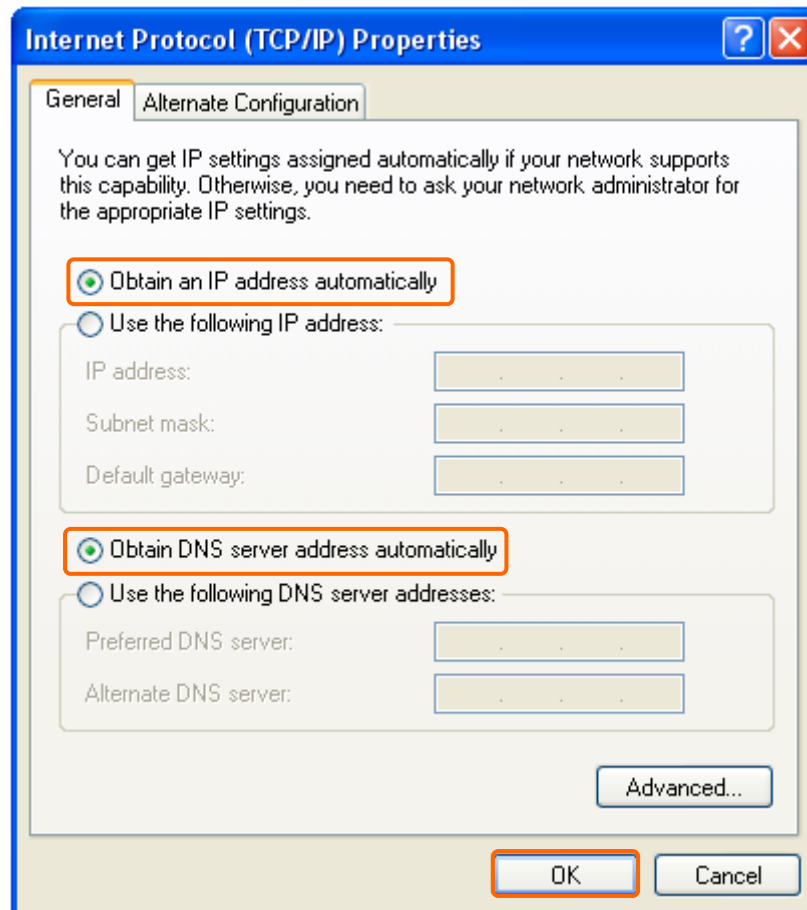
【Step3】

Double click on **Internet Protocol (TCP/IP)**.



【Step4-1】

For getting IP automatically if you are one of the users under the Palm Server Router, please skip **“Use the following IP address”** and then select **“Obtain an IP address automatically”** and **“Obtain DNS server address automatically”** and then click on **“OK”** button.



【Step4-2】

For getting IP manually in order to specify a Virtual Server, such as Print Server, FTP Server or SNMP Server and so on, please skip **“Obtain an IP address automatically”** and then select **“Use the following IP address”**. And the following default setting of the Palm Server Router should be noted:

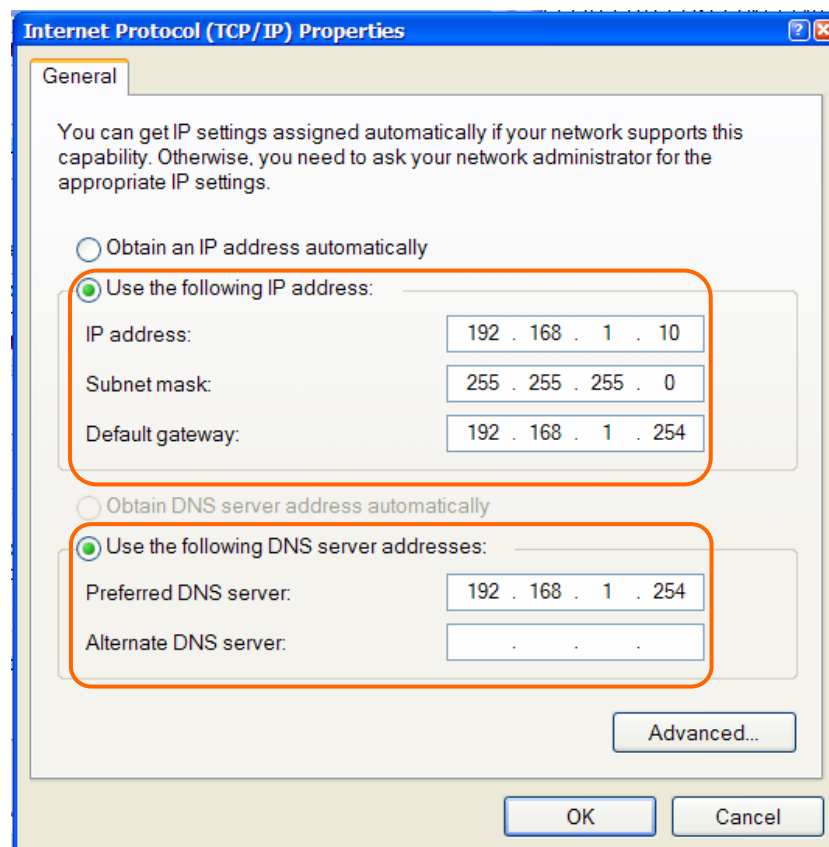
- IP Address: 192.168.1.1 (as your Print Server for example)
- Subnet Mask: 255.255.255.0
- Default gateway: 192.168.1.254 (for AP Mode, the default gateway for Router Mode is 192.168.1.1)

✘Notice: If you configure your computer's IP Address manually, it needs to be on the same network segment.

For example:

- IP Address: 192.168.1.xxx (xxx can be any number between 2 and 253, but it can't be repeated, we use 10 to be the example.)
- Subnet Mask: 255.255.255.0
- Gateway: 192.168.1.254 (this is the IP address of the Palm Server Router in AP Mode)
- DNS: 192.168.1.254 (use the Palm Server Router's IP address or on your own choice).

✘Notice: IP address and Default gateway couldn't be the same.



1.5.1 Network Testing

There are two ways to test your Network whether it can work on Internet or not. They are “Testing with Internet Browser” and “Testing with Dos”.

1.5.1.1 Testing with Internet Browser

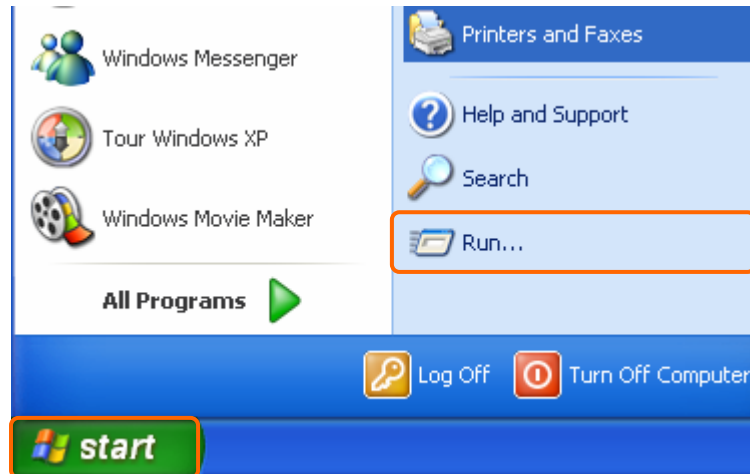
Open an Internet Browser, such as Internet Explore or Netscape. Input a valid web address you like, for example, **http://www.yahoo.com** in the web address blank and then press enter. If the website appears, that means your Internet is working under normal situation.



1.5.1.2 Testing with DOS (Windows XP Platform)

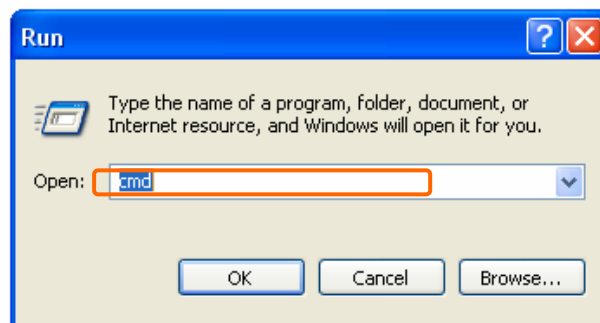
【Step1】

Go to **start > Run**.



【Step2】

Input **cmd** in the blank, and then click on **OK** button. The DOS icon will appear.



【Step3】

Input **ipconfig** in the flashing area then press enter. You will get an IP Address 192.168.1.200, for example, and Default Gateway as 192.168.1.1.

```
Connection-specific DNS Suffix . :  
IP Address. . . . . : 192.168.1.200  
Subnet Mask . . . . . : 255.255.255.0  
Default Gateway . . . . . : 192.168.1.1
```

【Step4】

Ping a legal WAN Address such as 192.168.1.254. If Internet works, it will show **Reply from 192.168.1.254: bytes = 32 time = 3ms TTL =64**, for example.

```
C:\ D:\WINDOWS\System32\cmd.exe

D:\Documents and Settings\arnold chen>ping 192.168.1.254

Pinging 192.168.1.254 with 32 bytes of data:

Reply from 192.168.1.254: bytes=32 time=3ms TTL=64
Reply from 192.168.1.254: bytes=32 time=1ms TTL=64
Reply from 192.168.1.254: bytes=32 time=1ms TTL=64
Reply from 192.168.1.254: bytes=32 time=1ms TTL=64

Ping statistics for 192.168.1.254:
    Packets: Sent = 4, Received = 4, Lost = 0 (0% loss),
    Approximate round trip times in milli-seconds:
        Minimum = 1ms, Maximum = 3ms, Average = 1ms
```

If it can't work, it will show **Request timed out**.

```
C:\ D:\WINDOWS\System32\cmd.exe

D:\Documents and Settings\arnold chen>ping 192.168.1.254

Pinging 192.168.1.254 with 32 bytes of data:

Request timed out.
Request timed out.
Request timed out.
Request timed out.
```


Chapter 2 Hardware Installation

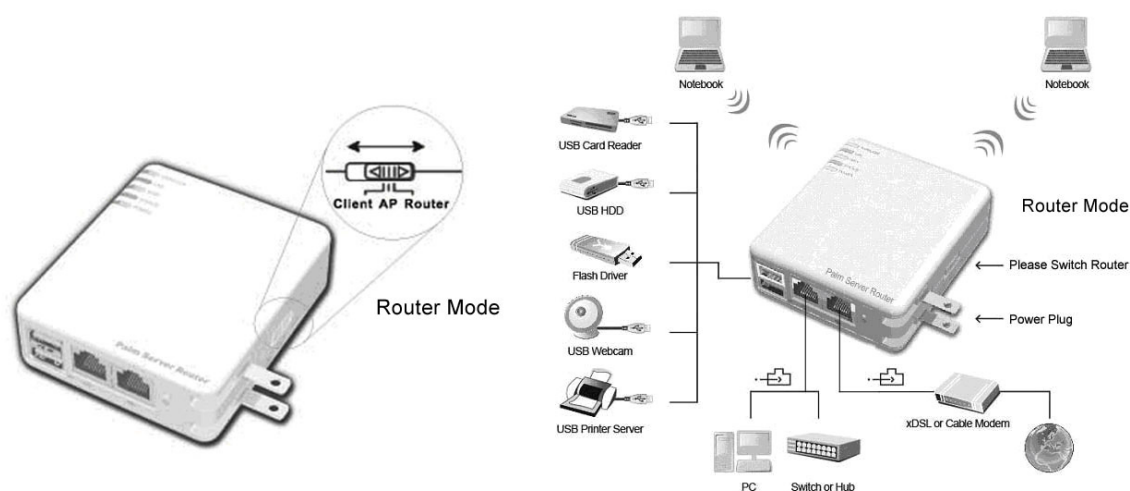
2.1 Diagram of connecting hardware to the Palm Server Router

The Palm Server Router is a portable and convenient wireless solution for the traveling businessmen delivering 802.11g wireless connectivity with a maximum wireless signal rate of up to 54Mbps. Use it in conference rooms, hotel rooms, or even at hotspots. The Wireless Pocket Router/AP might be small in size, but is huge in functionality, supporting multiple operation modes, including Access Point (AP) mode, Router mode, and Wireless Client mode. You can switch among these modes easily by using the Palm Server Router's 3-way configuration slide switch. Moreover, there are 2 USB ports support with the Palm Server Router; user can plug the USB devices including Flash Disk, Web Camera and Printer.

Warning: Before remove the slide switch, please power-off the router firstly. Moreover, please stay over 5 seconds between power-off / power-on condition.

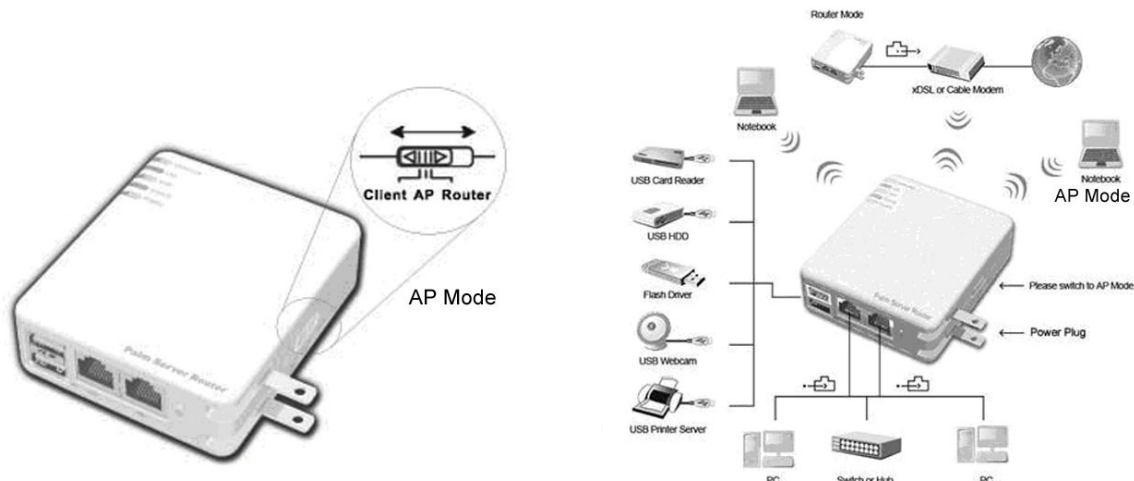
2.1.1 Router Mode Hardware connection and application

When the Palm Server Router switches to Router Mode, there will be each WAN and LAN port existing, the administrator can do the Quick Setup including WAN Setup, LAN Setup, Wireless Setup, USB Disk Management Setup, User Account Management Setup, Firewall Setup, QoS Setup, FTP Server Setup, Print Server Setup, Web Camera Setup, Time Server Setup and Password Setup.



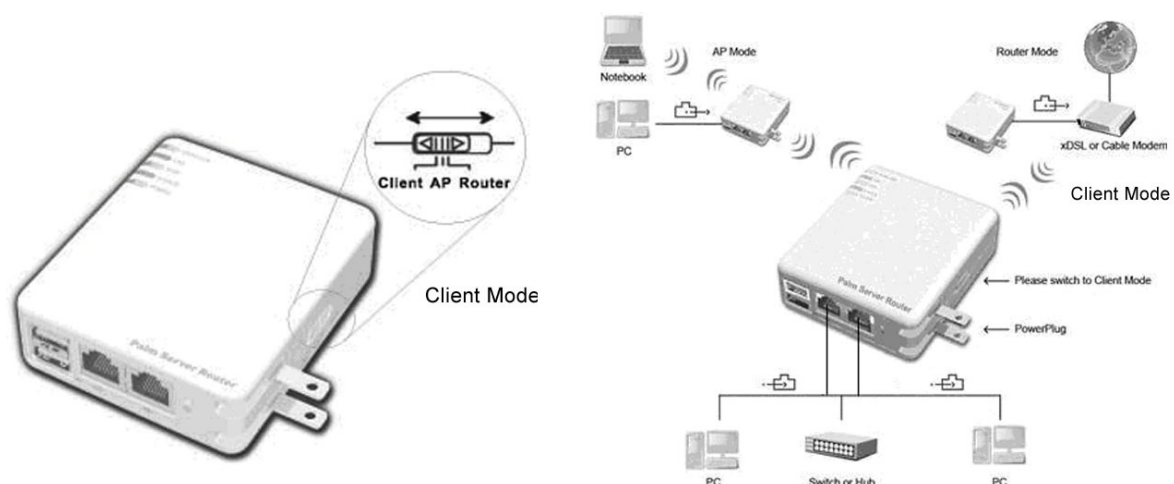
2.1.2 AP Mode Hardware connection and application

Under AP Mode, it supports 2 LAN ports as Bridge, and user can connect to the Palm Server Router via LAN port or Wireless (WDS). The administrator can do the Quick Setup including LAN Setup, Wireless Setup, USB Disk Management Setup, User Account Management Setup, FTP Server Setup, Printer Server Setup, Web Camera Setup and System Setup.



2.1.3 Client Mode Hardware connection and application

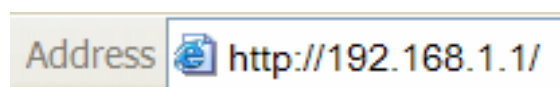
As Client Mode, Palm Server Router will be a Wireless Adapter, and users can plug cable to each 2 LAN ports and then connect Internet via Wireless.



Chapter 3 Router Mode

3.1 Administrator Quick Setup Instruction

Make sure to switch the mode into Router Mode, then open a Microsoft Internet Explorer, Mozilla Firefox or Apple Safari browser, and enter <http://192.168.1.1> (Default Gateway) into browser's blank.



Notice: If the homepage doesn't appear, please check if the TCP/IP configuration is obtaining IP address automatically or not. If you don't know how to do, please refer to "**1.5 Get your IP Automatically & Manually**".

Home Page



Please click on **Administrator** button to log in to setup at first time, also any settings can be changed in the future. Only the Administrator has the right to set and change all settings.

User Name and Password

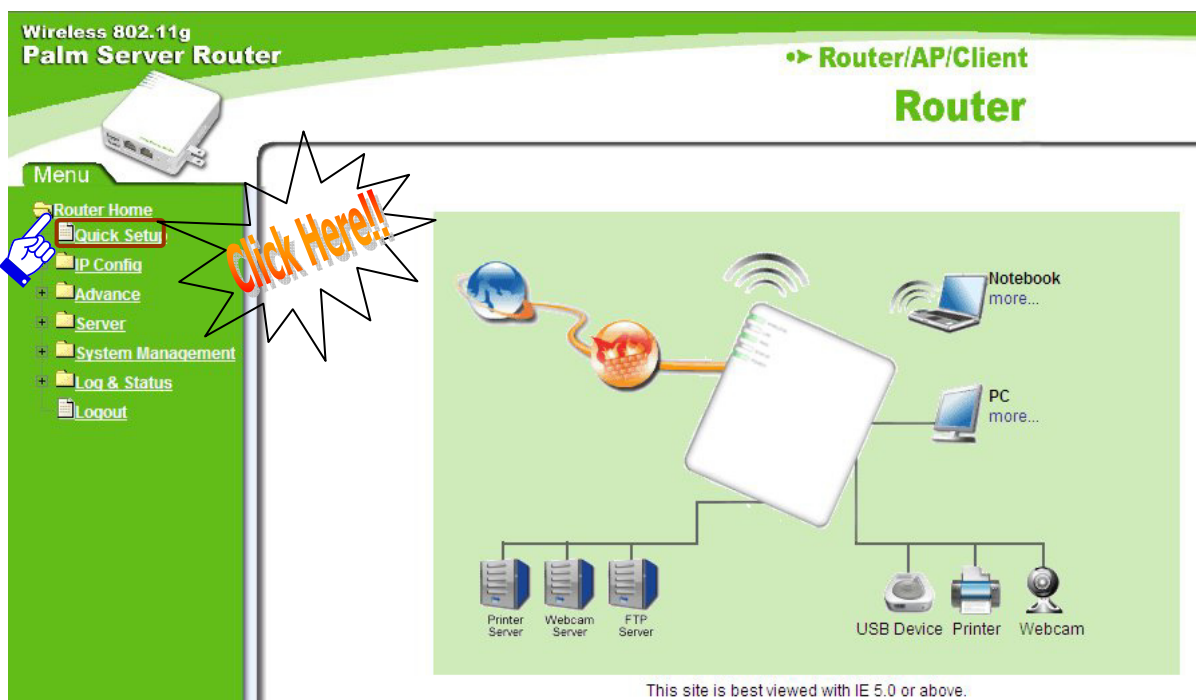


The default values for User Name and Password are “**admin**” and “**admin**” (all in lowercase letters).

Notice: Only the password can be changed, please read setup “**3.2.12 Password Setup**” or “**3.6.2 Change Password**”. In order to protect your own settings, it's strongly recommended to change the password before you finish the Router Basic Setup.

3.2 Quick Setup

Typical Configuration Manager Page consists of two separate frames. The left frame contains all the means available for device configuration. Menus are indicated by file icons, and related menus are grouped into categories, such as LAN, WAN and etc., and indicated by folder icon, depending on whether the group of menus are expanded or not. You can click on any of these to display a specific configuration page.



This site is best viewed with IE 5.0 or above.

The above diagram shows all PCs and devices connected to your Palm Server Router and their status. Click on **Quick Setup** on the left screen of the main menu. Then you'll see the full functionality selection screen appears and do the setting for each item.

Note: The device models named of USB Device, Webcam and Printer will be shown under the picture of each device if the product supports.

Quick Setup full function table list

Quick Setup Selection		
<input checked="" type="checkbox"/>	WAN Setup	→ Initiate as default setting.
<input checked="" type="checkbox"/>	LAN Setup	→ Initiate as default setting.
<input checked="" type="checkbox"/>	Wireless Setup	→ Initiate as default setting.
<input type="checkbox"/>	USB Disk Management Setup	
<input type="checkbox"/>	User Account Management Setup	
<input type="checkbox"/>	Firewall Setup	
<input type="checkbox"/>	QoS Setup	
<input type="checkbox"/>	FTP Server Setup	
<input type="checkbox"/>	Printer Server Setup	
<input type="checkbox"/>	Web Camera Setup	
<input checked="" type="checkbox"/>	Time Server Setup	→ Initiate as default setting.
<input checked="" type="checkbox"/>	Password Setup	→ Initiate as default setting.
		Next Exit

Quick Setup instruction

- **WAN Setup:** Setup the connecting type provided by your ISP, 4 modes of WAN connection are supported by the Palm Server Router—Static IP, Dynamic IP, PPPoE, and PPTP.
- **LAN Setup:** Setup the IP Address for LAN and Group. If you are using the Router with multiple PCs on your LAN, you must connect the LAN via the Ethernet ports on the built-in Ethernet switch. You should also assign a unique IP address to each device residing on your LAN.
- **Wireless Setup:** Define the Wireless Mode, ESSID, TxRate, Channel and other wireless settings.
- **USB Disk Management Setup:** View the entire data folder inside each storage devices, also can do formatting and disk partition.

- **User Account Management Setup:** Set maximum user number, account and right for using personal services of your Palm Server Router for each user.
- **Firewall Setup:** To enable Firewall and set security level.
- **QoS Setup:** To enable/disable QoS setup.
- **FTP Server Setup:** To enable FTP server and set controlling rules.
- **Print Server Setup:** To enable /disable server.
- **Web Camera Setup:** To enable Web camera function and set image format.
- **Time Server Setup:** Set time by NTP or manual.
- **Password Setup:** To change administrator's password.

There are 5 major items shall be set in configuring Quick Setup, and the others can be selected under your demanding, please click on **Next** button after confirmed.

3.2.1 WAN Setup (Internet Connection)

WAN is short for Wide Area Network. The WAN settings can be referred to as the Public setting. All IP information in the WAN settings is public IP addresses which are accessible on the Internet. The Palm Server Router supports 4 connection types to WAN. Select one of the WAN connection modes required by your ISP in the following Internet Connection Configuration page, the WAN setup pages will vary depending on what kind of WAN Type you select.

Quick Setup - Set Internet Connection		
Select the connection type to connect to your ISP. Click Next to continue.		
<input type="radio"/> Static IP	Choose this option to set static IP information provided to you by your ISP.	See 3.2.1.1.
<input checked="" type="radio"/> Dynamic IP	Choose this option to obtain an IP address automatically from your ISP.(For most Cable modem users)	See 3.2.1.2.
<input type="radio"/> PPPoE	Choose this option if your ISP uses PPPoE.(For most DSL users)	See 3.2.1.3.
<input type="radio"/> PPTP	For Europe use only.	See 3.2.1.4.

Choose the WAN type as the above mentioned, and its required settings will show up underneath your chosen one.

3.2.1.1 WAN Type – Static IP

Choose Static IP Address if all WAN IP information is provided to you by your ISP. You will need to enter the IP address, IP Netmask and IP gateway provided by your ISP. Each entered fields must be in the appropriate IP form, which are four IP octets separated by a dot (x.x.x.x). The Router will not accept the IP address if it is not in this format. If ISP provide you DNS information, please select “Specify DNS Server IP”; otherwise, select “No Default DNS Server”.

Quick Setup - Set Internet Connection	
Select the connection type to connect to your ISP. Click Next to continue.	
<input checked="" type="radio"/> Static IP	Choose this option to set static IP information provided to you by your ISP.
<input type="radio"/> Dynamic IP	Choose this option to obtain an IP address automatically from your ISP.(For most Cable modem users)
<input type="radio"/> PPPoE	Choose this option if your ISP uses PPPoE.(For most DSL users)
<input type="radio"/> PPTP	For Europe use only.
Static IP	
Enter in the static IP information provided to you by your ISP. Click Next to continue.	
IP Address :	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>
IP Netmask :	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>
IP Gateway :	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>
DNS	
DNS :	<input checked="" type="radio"/> No Default DNS Server <input type="radio"/> Specify DNS Server IP
Primary :	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>
Secondary :	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>
<div>Back Next Exit</div>	

Please click on **Next** button to go on “3.2.2 LAN Setup”.

3.2.1.2 WAN Type – Dynamic IP

Choose Dynamic IP to obtain IP address information automatically from your ISP. Select this option if your ISP does not give you any IP numbers to use. This option is commonly used for Cable modem services. If ISP provided you DNS information, please select “Specify DNS Server IP”; otherwise, select “No Default DNS Server”.

Select the connection type to connect to your ISP. Click Next to continue.

<input type="radio"/> Static IP	Choose this option to set static IP information provided to you by your ISP.
<input checked="" type="radio"/> Dynamic IP	Choose this option to obtain an IP address automatically from your ISP. (For most Cable modem users)
<input type="radio"/> PPPoE	Choose this option if your ISP uses PPPoE. (For most DSL users)
<input type="radio"/> PPTP	For Europe use only.

Dynamic IP

If your ISP requires you to enter a specific hostname or specific MAC address, please enter it in. The Clone MAC Address is used to copy the MAC address of your Ethernet adapter to the gateway. Click Next to continue.

Hostname : → **Input it if requested by your ISP (Ex: Palm Server Router)**

☐ Keep Default MAC Address

☒ Clone MAC Address: 00:11:2F:00:08:15

☐ : : : : : → **MAC address**

DNS

DNS : ☒ No Default DNS Server ☐ Specify DNS Server IP

Primary : . . .

Secondary : . . .

Click on **Next** button to go on **“3.2.2 LAN Setup”**.

3.2.1.3 WAN Type – PPPoE

This option is typically used for DSL services. Choose PPPoE (Point to Point Protocol over Ethernet) if your ISP uses PPPoE connection. Your ISP will provide you with a username and password. MTU stands for Maximum Transmission Unit. For PPPoE connections, you may need to change the MTU setting in order to work correctly with your ISP. As Idle Time, it's the amount of time of inactivity before disconnecting your PPPoE session. Enter an Idle Time (in minutes) to define and period of time for which the Internet connection is maintained during inactivity. If the Auto-reconnect enabled, the Router will automatically connect to your ISP after your system is restarted, or if the connection is dropped. If ISP provides you DNS information, please select “Specify DNS Server IP”; otherwise, select “No Default DNS Server”.

Select the connection type to connect to your ISP. Click Next to continue.

<input type="radio"/> Static IP	Choose this option to set static IP information provided to you by your ISP.
<input type="radio"/> Dynamic IP	Choose this option to obtain an IP address automatically from your ISP.(For most Cable modem users)
<input checked="" type="radio"/> PPPoE	Choose this option if your ISP uses PPPoE.(For most DSL users)
<input type="radio"/> PPTP	For Europe use only.

PPPoE

Please set your PPPoE data and click Next to continue.

User Name : → **Input it provided by your ISP.**

Password : → **Input it provided by your ISP.**

MTU : (576~1492)

Idle Time : (0~60 Minutes)

Auto Reconnect : ☒

DNS

DNS : ☒ No Default DNS Server ☐ Specify DNS Server IP

Primary : . . .

Secondary : . . .

Click on **Next** button to go on **“3.2.2 LAN Setup”** in page 32.

3.2.1.4 WAN Type – PPTP

This option is typically used for DSL services. Some DSL service providers supply a special DSL modem. This kind of modem only supports the PPTP tunnel to access the Internet, you should create a PPTP tunnel that carries a PPP session and terminates on the DSL model. Once the tunnel has been established, this kind of DSL modem will forward the PPP session to the ISP. As long as the PPP session is connected, all the local users will be able to share this PPP session to access to the Internet. If ISP provided you DNS information, please select “Specify DNS Server IP”; otherwise, select “No Default DNS Server”.

PPTP

Please set you PPTP Client data then press Next to continue.

PPTP : ☐ Dial On Demand ☒ Always Online ☐ Manual

PPTP Account :

PPTP Password :

Retype your Password :

PPTP Server IP : . . .

My WAN IP : . . .

My WAN Subnet Mask : . . .

MTU : (1400~1460)

Maximum Idle Time : (0~60)

PPTP Server IP, My WAN IP and My WAN Subnet Mask are all necessary inputs.

DNS

DNS : ☒ No Default DNS Server ☐ Specify DNS Server IP

Primary : . . .

Secondary : . . .

Back Next Exit

Please enter the account's name and password which provided by your ISP, and then click on **Next** button to go on **“3.2.2 LAN Setup”**.

3.2.2 LAN Setup

If you are using the Palm Server Router with multiple PCs on your LAN, you must connect the LAN via the Ethernet ports on the built-in Ethernet switch. You must assign a unique IP address to each device residing on your LAN. The LAN IP address identifies the router as a node on your network; that is, its IP address must be in the same subnet as the PCs on your LAN. The default LAN IP for the Internet Security Router is 192.168.1.1.

LAN Configuration				
Use this page to set up the local IP address and subnet mask for your router.				
LAN IP				
IP Address :	192	168	1	1
IP Netmask :	255	255	255	0
DHCP				
DHCP :	<input checked="" type="radio"/> Enable <input type="radio"/> Disable			
Start IP :	2			
End IP :	253			
Advanced :	<input type="checkbox"/>			
Router :	192	168	1	1
DNS :	192	168	1	1
WINS :				
<input type="button" value="Apply"/> <input type="button" value="Cancel"/>				

The setup of pre-assigned Gateway IP Address is suggested for good to use.

Requested to be as complied as LAN IP.

For Gateway IP Address, the IP address 192.168.1.xxx (xxx can be any number between 1 and 254 that is not used by another device.) Please don't change the default LAN IP settings at this section until you have completed the rest of the configurations and confirm that your Internet connection is working. And the DHCP Server will automatically allocate an unused IP address from the IP address pool to the requesting computer. You must specify the starting and ending address of the IP address pool.

Click on **Next** button to proceed the next setting.

3.2.3 Wireless Setup

The Palm Server Router is based on industry standards to provide compatible high-speed wireless connectivity within your home, business or public access wireless networks. Strictly adhering to the IEEE standard, the router will allow you to access the data you want, when and where you want it. You will be able to enjoy the freedom that wireless networking delivers.

Wireless Configuration	
MAC Address : 00:14:85:d0:bc:03	
Wireless :	AP/Bridge → Select AP/Bridge or WDS from drop-down list.
Wireless Mode :	802.11B/G
ESSID :	PalmServerRouter → You can use the default ESSID unless more than one AP/Router is deployed in the same area. And it will show when searching the wireless signal.
TxRate :	Auto
Channel :	11
Hide SSID :	<input type="radio"/> ON <input checked="" type="radio"/> OFF
TxPreamble :	<input checked="" type="radio"/> Long <input type="radio"/> Short
Beacon interval :	100 msec(20~999, default:100)
RTS Threshold :	2346 (256~2346, default:2346)
Authentication Mode :	<input checked="" type="radio"/> OPEN <input type="radio"/> SHARED
Encrypt Type :	WEP
Apply Cancel	

For selecting configuration utility in AP/Bridge wireless connection, the **Channel 6** is the default channel; all devices on the network must be set to the same channel to communication on the network. The default **TxPreamble** setting is Long (if you use high traffic networks should use the shorter preamble type). **Authentication** is the security function to prevent the connection requests from unauthorized wireless clients. As the **Encryption Type**, select WEP or WPA can protect your data from eavesdroppers, if you do not need the encryption, select “None” to skip the following setting.

For selecting configuration utility in WDS wireless connection, please refer to “**3.3.3 Wireless**” for detail setting.

After checking each above blank and choose the suitable item as your demand, click on “**Next**” button to proceed to next setting.

Notice: If use AP/Bridge to do wireless connection to router, here suggest disable the DHCP setup in LAN Setup, please refer to “**3.3.2 LAN**”.

3.2.4 USB Disk Management Setup

Easy to check all the USB storage devices connected to your Palm Server Router, view the entire data folder inside each storage device, and you can manage the disk formatting/partitioning via click on the button of this page.

Quick Setup - USB Disk Management

You can specify which USB storage to be System Disk.

USB Device Name

SysDisk	Disk	TYPE	Capacity	Free Space	
<input checked="" type="radio"/>	USB A	FAT16	251 MB	208 MB	Unplug

Disk ExplorerOK

Partition / Format SysDisk

All existing data and partitions on the HDD will be DESTROYED ! Make sure you really need to do this !

TYPE☒ EXT3 ☐ FAT32

Format

BackNextExit

Select the USB Disk and click on “**OK**” button for refreshing all disks before you do disk partition, and the “**Unplug**” button will appear. To partition/format the disk, please select the disk and click on “**Format**” button. Moreover, if you want to view the data inside the disk, please go to “**3.2.8 FTP Sever Setup**” to enable FTP server and then click on “**Disk Explorer**” to view all folders inside the device.

Notice: You have to click on “**Unplug**” button before removing the USB devices from the Palm Server Router.

3.2.5 User Account Management Setup

Personal users can use each individual application such as My Status, My Webcam and My Document. This section is to set the user's right. Also, all the users right will be showed in User Account List and can do the edit or delete by clicking the meaning text.

User Account Management

Max Login User : 10

Create User Account

User Name : Password :

Group Right : ☐ View Webcam Recorded Files

User Right : ☐ Web Camera Monitor ☐ FTP Server

Activated : ☒ On ☐ Off

User Account List

User Name	Password	Status	Right	Edit/Delete
jacky	****	Active	FTP/Webcam/	Edit /Delete
Trista	****	Active	FTP/Webcam/	Edit /Delete

Input the User's name and password, and then click on "Add", and you will see the user information appear on the "User Account List"

Set each user's right and space arrangement, then click on **"Add"** button for saving user's setting, and click on **"Next"** button after finished.

3.2.6 Firewall Setup

The Firewall rules of the Palm Server Router are an advance feature used to deny or allow traffic from passing through the router.

Firewall Protection Level :

- ☐ High
 - *Attacks Blocking Policy: SPI Service Enabled, Blocking ICMP Ping from WAN, and All DoS Attacks.
 - *Inbound IP Filter Policy: Deny All
 - *Outbound IP Filter Policy: Deny All, But Outbound access is allowed to the following services: Telnet, FTP, HTTP, HTTPS, DNS, IMAP, POP3 and SMTP. (Please note that the Firewall will not block applications that use these services, such as Peer-to-Peer client applications or Internet Messengers.)
 - *Router Service Access Policy from WAN: Blocking Web, FTP, Webcam, and Printer.
- ☐ Medium
 - *Attacks Blocking Policy: SPI Service Enabled, Blocking ICMP Ping from WAN, and Common DoS Attacks (SYN Flooding & ICMP Verbose).
 - *Inbound IP Filter Policy: Deny All
 - *Outbound IP Filter Policy: Allow All
 - *Router Service Access Policy from WAN: Blocking Web Management and Printer.
- ☒ Low
 - *Attacks Blocking Policy: SPI Service Enabled, Blocking Common DoS Attacks (SYN Flooding & ICMP Verbose).
 - *Inbound IP Filter Policy: Allow All
 - *Outbound IP Filter Policy: Allow All
 - *Router Service Access Policy from WAN: Allow All

Back Next Exit

The default setting for Firewall Protection Level security is in Low Level, which attacks Blocking Policy, allow all Inbound and Outbound IP Filter Policy, and allow all router service access policy from WAN. Please change it as your demand, and click on “**Next**” button to next step.

3.2.7 QoS Configuration Setup

QoS management helps to set and evaluate QoS policies and goals. It is the particular concern for the continuous transmission of high-bandwidth video and multimedia information. Transmitting this kind of content dependably is difficult in public networks using ordinary best effort protocols.

Quick Setup - QoS Configuration

Enable QoS Service : ☒ Enable ☐ Disable

Current Upstream Bandwidth : (Kbps, default:100000 Kbps, MAX:100000 Kbps)

Priority

High :	<input type="text" value="60"/> (%)
Medium :	<input type="text" value="30"/> (%)
Low :	<input type="text" value="10"/> (%)

Input the figures under by demand to decide your priority order.

Application		
Status	Description	Priority
Enable <input type="button" value="v"/>	FTP	Medium <input type="button" value="v"/>
Enable <input type="button" value="v"/>	HTTP	High <input type="button" value="v"/>
Enable <input type="button" value="v"/>	E-mail	Low <input type="button" value="v"/>
Enable <input type="button" value="v"/>	Telnet	Medium <input type="button" value="v"/>
Enable <input type="button" value="v"/>	Voice: H323, SIP	High <input type="button" value="v"/>
Enable <input type="button" value="v"/>	Games: MSDirectPlay, Battle.Net, Quake2(Doom3), Unreal(CS)	High <input type="button" value="v"/>
Enable <input type="button" value="v"/>	IM: AOL(ICQ), MSN, Yahoo	High <input type="button" value="v"/>
Enable <input type="button" value="v"/>	Video: RTSP	Low <input type="button" value="v"/>

Make sure your connecting bandwidth with ISP and set the priority percentage. Once setting the QoS service, the transmitting performance will be affected, so please ensure your connection setting before doing this setup. Click on **Next** button to next step after finishing the above.

3.2.8 FTP Server Setup

The Palm Server Router can be the FTP Server providing users to transmit files, also for the guest can download the files from assigned website. Moreover, by connecting USB HDD, USB Flash to the router, user can easily set up a FTP Server to share or download files for local or remote users.

Quick Setup - FTP Server	
Enable FTP Server :	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Enable Anonymous to Login :	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Enable FTP Access from WAN :	<input type="radio"/> Enable <input checked="" type="radio"/> Disable

If the USB device isn't enabled first, you can't enable FTP Server. (Not even click on "Enable")

Set the FTP Server and related setting. Disable the function as demand, and click on **Next** button to continue.

3.2.9 Printer Server Setup

The Palm Server Router, an Internet access solution for your LAN, which provides you the shared web surfing, and support USB interface printer, any users in the same subnet of the Palm Server Router can print their document via the network printers.

Quick Setup - Printer Server

Enable Printer Server: ☐ Enable ☒ Disable

If the printer isn't connected, you can't choose "Enable".

Back Next Exit

Enable the printer and click on **Next** button to connect to next setup.

Notice: After above Printer Server in Quick Setup finish, the related printing settings on the Palm Server Router and PC have to be set also. Please refer to **"3.5.3 Printer Server"** to set the detail printer setting.

3.2.10 Web Camera Server Setup

If you plan to use the Palm Server Router as a Web Camera site, connect a supported USB Web Camera to the USB port of the Palm Server Router. To enable the webcam server and access from WAN as demand, and the Image format can be selected.

Quick Setup - Web Camera Server

Enable webcam server: ☒ Enable ☐ Disable

Access from WAN: ☐ Enable ☒ Disable

Image format: CIF

Make sure the webcam already connected to Palm Server Router, and then select "Enable" under your demand and situation; moreover, you have to make sure the "image format" which you want to see on the screen.

Back Next Exit

Click on **Next** button to connect to next step.

Notice: Before webcam server enabled, please make sure the webcam has connected to the product; otherwise, the "Enable" selection can't be checked.

3.2.11 Time Server Setup

The section provides time alteration. The Router keeps a record of the current date and time, which is used to calculate and report various performance data, but changing the router's date and time does not affect the date and time on your PCs.

Quick Setup - Time Server

Please set your time and time zone in this page.

Local Time : 2007/05/01 Thu 08:16:12

☒ Setup Time Use NTP

Default NTP Server : clock.stdtime.gov.tw (optional)

Time Zone : (GMT+08:00) Beijing, Hong Kong, Singapore, Taipei

Daylight saving time : Disable

☐ User Setup

Set the Time : Year : 2004 Month : Jan Day : 01
Hour : 00 Minute : 00 Second : 00

Back Next Exit

Select your time zone from the "Time Zone" drop-down list or you may set the time by manual.

Select your time zone from the "Time Zone" drop-down list, or you may set the time by manual; there is no real time clock inside the router, the system date and time are maintained by external network time server.

3.2.12 Password Setup

Here suggests changing the password for logging into the configuration manager in terms of security reason.

Quick Setup - Change Password

The router ships with no password. You may set a password or change your current password in this page.

Login : admin

Old Password :

New Password :

New Password (Confirm) :

The password may consist of A-Z, a-z, 0-9, underscores, and a single dot (.)

Back Next Exit

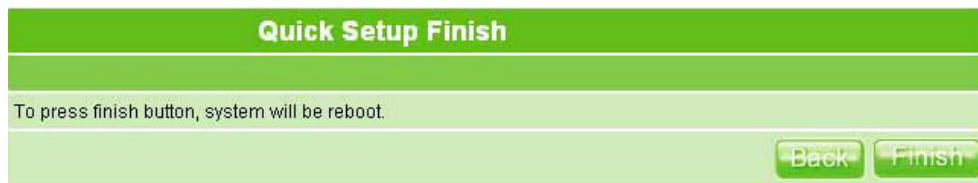
For changing password, please fills the password information into above blanks, and then clicks on **Next** button.

Notice 1: Only the password can be changed, the user name for administrator is **admin** and is not allowed to be changed.

Notice 2: If you forget administrator's password, please reset the Palm Server Router to default setting by pushing the "Reset" button on the rear panel for 5 seconds. And the password will return to **admin**.

3.2.13 Quick Setup Finish

The Quick Setup has been completed successfully when you see this screen.



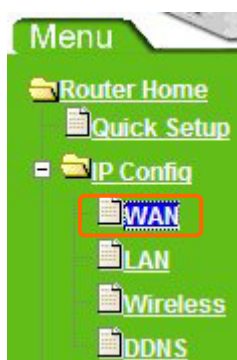
To apply your new settings, please click on “**Finish**” button to reboot system automatically and go to the product’s diagram homepage. You may connect to Internet via wired or wireless at this moment according to above settings.

3.3 IP Configuration

This function allows you to add routing rules into Palm Server Router. It is useful if you connect several computers behind the Palm Server Router to share the same connection to Internet.

3.3.1 WAN

Select **WAN** under the **IP Config** menu. The Palm Server Router supports four WAN connection types, i.e. **Static IP Address**, **Dynamic IP Address**, **PPPoE** and **PPTP**. Follow the instructions to enter the WAN setting page.



3.3.1.1 Static IP

The WAN (Wide Area Network) page shows the settings that are used to connect to your ISP (Internet Service Provider). Please select the **Static IP** for your specific ISP.

The screenshot shows the 'WAN Configuration' page. At the top, there's a green header with the title 'WAN Configuration'. Below it, a light green box contains the instruction 'Select the connection type to connect to your ISP. Click it'. Underneath, the 'Internet Connection Type' is set to 'Static IP' (selected with a radio button), with other options being 'Dynamic IP', 'PPPoE', and 'PPTP'. The 'Static IP' section is highlighted in green and contains three rows of input fields: 'IP Address', 'IP Netmask', and 'IP Gateway', each with four boxes for digits and dots. Below this is the 'DNS' section, also highlighted in green. It has a 'DNS' label and two radio buttons: 'No Default DNS Server' (selected) and 'Specify DNS Server IP'. Below these are 'Primary' and 'Secondary' DNS input fields, each with four boxes for digits and dots. At the bottom right, there are 'Apply' and 'Cancel' buttons.

If you applied for a **Static IP** connection type from ISP, please follow the steps to setup your WAN connection.

1. IP Address

Input your IP Address supplied by ISP. If you don't know, please check with your ISP.

2. Subnet Mask

Input Subnet Mask, normally it is **255.255.255.0**.

3. ISP Gateway Address

Input ISP Gateway Address. If you don't know, please check with your ISP.

4. DNS

If ISP provides you DNS information, please select "**Specify DNS Server IP**" and input the DNS information into the blank; otherwise, select "**No Default DNS Server**".

5. Apply & Cancel

Click on **Apply** button to continue. Click on **Cancel** button to clear the settings on this page.

3.3.1.2 Dynamic IP

If you applied for a **Dynamic IP** connection type from ISP, please follow the steps to setup your WAN connection. Cable modem providers typically use dynamic assignment of IP Address.

WAN Configuration	
Select the connection type to connect to your ISP. Click it	
Internet Connection Type :	<input type="radio"/> Static IP <input checked="" type="radio"/> Dynamic IP <input type="radio"/> PPPoE <input type="radio"/> PPTP
Dynamic IP	
Hostname :	<input type="text" value="default"/>
<input type="radio"/> Keep Default MAC Address	
<input checked="" type="radio"/> Clone MAC Address : 00:11:2F:00:08:15	
<input type="radio"/> <input type="text"/> : <input type="text"/> : <input type="text"/> : <input type="text"/> : <input type="text"/> : <input type="text"/>	
DNS	
DNS : <input checked="" type="radio"/> No Default DNS Server <input type="radio"/> Specify DNS Server IP	
Primary :	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>
Secondary :	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>
<input type="button" value="Apply"/> <input type="button" value="Cancel"/>	

1. Host Name

The host name is optional; but if your ISP requires you to input a specific host name, please put it in, for example, the Palm Server Router applied from ISP. Generally, Cable Modem will provide the hostname information.

2. MAC Address: Keep, Clone & Input MAC Address

Select **Keep** or **Clone MAC Address** for copying the MAC address of your Ethernet adapter to the gateway, or **input a group of MAC Address**. Generally, your ISP will inform you.

3. DNS

If ISP provides you DNS information, please select “**Specify DNS Server IP**” and input the DNS information into the blank; otherwise, select “**No Default DNS Server**”.

4. Apply & Cancel

Click on **Apply** button to continue. Click on **Cancel** button to clear the settings on this page.

3.3.1.3 PPPoE

If you applied for a **PPPoE** connection type from ISP, please follow the steps to setup your WAN connection.

The screenshot shows the 'WAN Configuration' window. At the top, it says 'Select the connection type to connect to your ISP. Click it'. Under 'Internet Connection Type', there are four radio buttons: 'Static IP', 'Dynamic IP', 'PPPoE' (which is selected), and 'PPTP'. Below this is a section for 'PPPoE' settings. It includes fields for 'User Name', 'Password', 'MTU' (with a range of 576~1492), 'Idle Time' (with a range of 0~60 Minutes), and an 'Auto Reconnect' checkbox which is checked. Below the PPPoE section is a 'DNS' section. It has a 'DNS' label and two radio buttons: 'No Default DNS Server' (selected) and 'Specify DNS Server IP'. Below these are fields for 'Primary' and 'Secondary' DNS servers, each represented by four input boxes separated by dots. At the bottom right, there are 'Apply' and 'Cancel' buttons.

1. User Name

Input your user name supplied by ISP. If you don't know, please check with your ISP.

2. Password

Input your Password supplied by ISP.

3. MTU

MTU stands for Maximum Transmission Unit. For PPPoE connection, you may need to set the MTU setting in order to work correctly with your ISP.

4. Idle Time

It is the time of inactivity before disconnecting your PPPoE session. Enter an Idle Time (in minutes) to define a maximum period of time for which the Internet connect is maintained during inactivity. If the connection is inactive for longer than the defined Idle Time, then the connection will be dropped. Either set this to zero or enable Auto-reconnect to disable this feature.

5. Auto-reconnect

If enabled, the Router will automatically connect to your ISP after your system is restarted or if the connection is dropped.

6. DNS

If ISP provides you DNS information, please select “**Specify DNS Server IP**” and input the DNS information into the blank; otherwise, select “**No Default DNS Server**”.

7. Apply & Cancel

Click on **Apply** button to continue. Click on **Cancel** button to clear the settings on this page.

3.3.1.4 PPTP

If you have applied for a **PPTP** connection type from ISP, please follow the steps to setup your WAN connection.

WAN Configuration	
Select the connection type to connect to your ISP. Click it	
Internet Connection Type :	<input type="radio"/> Static IP <input type="radio"/> Dynamic IP <input type="radio"/> PPPoE <input checked="" type="radio"/> PPTP
PPTP	
Please set you PPTP Client data then press Next to continue.	
PPTP :	<input type="radio"/> Dial Ondemand <input checked="" type="radio"/> Always Online <input type="radio"/> Manual
PPTP Account :	<input type="text"/>
PPTP Password :	<input type="text"/>
Retype your Password :	<input type="text"/>
PPTP Server IP :	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>
My WAN IP :	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>
My WAN Subnet Mask :	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>
MTU :	<input type="text"/> (1400~1460)
Maximum Idle Time :	<input type="text"/> (0~60)
DNS	
DNS :	<input checked="" type="radio"/> No Default DNS Server <input type="radio"/> Specify DNS Server IP
Primary :	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>
Secondary :	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>
<input type="button" value="Back"/> <input type="button" value="Next"/> <input type="button" value="Exit"/>	

1. PPTP

Select connect to PPTP by On-demand, Always Online or Manual connects.

2. PPTP Account

Input the PPTP Account supplied by ISP, Palm Server Router, for example. If you don't know, please check with your ISP.

❑ **Notice: Don't copy the mentioned example as yours.**

3. PPTP Password

Input the Password supplied by ISP.

4. Retype your Password

Retype the password into this blank for confirming.

5. PPTP Server IP

Input the Server IP supplied by ISP. If you don't know, please check with your ISP.

Input the WAN IP address provided by your ISP.

6. My WAN Subnet Mask

Input the WAN Subnet Mask supplied by your ISP. If you don't know, please check with your ISP.

7. MTU

MTU stands for Maximum Transmission Unit. For PPTP connections, you may need to set the MTU setting in order to work correctly with your ISP.

8. Idle Time

It is the time of inactivity before disconnecting your PPTP session. Enter an Idle Time (in minutes) to define a maximum period of time for which the Internet connect is maintained during inactivity. If the connection is inactive for longer than the defined Idle Time, then the connection will be dropped. Either set this to zero or enable Auto-reconnect to disable this feature.

9. DNS

If ISP provides you DNS information, please select "**Specify DNS Server IP**" and input the DNS information into the blank; otherwise, select "**No Default DNS Server**".

10. Apply & Cancel

Click on **Apply** button to continue. Click on **Cancel** button to clean the setting on this page. If you don't know how to do, please click on **Help** button.

3.3.2 LAN

Use this page to set up the local IP address and subnet mask for your router. Please select **LAN** under the **IP Config** menu and follow the instructions below to enter the LAN setting page to configure the settings you want.



1. IP Address

The default value of LAN IP address is **192.168.1.1** for this router.

2. IP Netmask

Input Subnet Mask, normally it is **255.255.255.0**.

3. DHCP

Enable or disable DHCP services. The DHCP server will automatically allocate an unused IP address from the IP address pool to the requesting computer if enabled.

4. Start IP

This field specifies the first address in the pool to be assigned by the DHCP server in your local network. The default setting is 2.

5. End IP

This field specifies the last address in the pool to be assigned by the DHCP server in your local network. The default setting is 253.

6. Advanced

Enable the advance setting and then setup the Router, DNS and WINS value.

7. Router

This field indicates the IP address of DNS to provide to clients that request IP Address from DHCP Server, the default setting is the same with LAN IP address.

8. DNS

This field indicates the IP address of DNS to provide to clients that request IP Address from DHCP Server, the default setting is the same with LAN IP address.

9. WINS

The Windows Internet Naming Service manages interaction of each PC with the Internet. If you use a WINS server, enter IP Address of server here.

10. Apply & Cancel

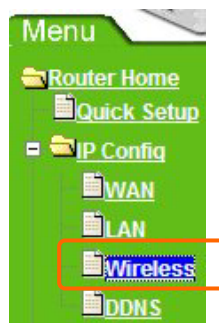
Click on **Apply** button to continue. Click on **Cancel** button to clear the settings on this page.

Besides, the DHCP information will be listed below, above DHCP Clients list, including IP Address and MAC address.

LAN Configuration	
Use this page to set up the local IP address and subnet mask for your router.	
LAN IP	
IP Address :	192 . 168 . 1 . 1
IP Netmask :	255 . 255 . 255 . 0
DHCP	
DHCP :	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Start IP :	2
End IP :	253
Advanced :	<input type="checkbox"/>
Router :	192 . 168 . 1 . 1
DNS :	192 . 168 . 1 . 1
WINS :	
<input type="button" value="Apply"/> <input type="button" value="Cancel"/>	
DHCP Clients List	
IP	MAC
192.168.1.2	00:11:2f:00:08:15

3.3.3 Wireless

The Palm Server Router enables fastest 54 Mbps IEEE802.11g wireless transmissions and keeps compatibility with existing IEEE 802.11b devices. The Palm Server Router complies with IEEE 802.11b standard. Please select **Wireless** under the main menu. Follow the instructions to configure the **Wireless** settings.



1. Wireless

Select **AP/Bridge** or **WDS** to allow or disallow the wireless operation.

2. Wireless Mode

This field indicates the 802.11g interface mode. "802.11G" prevents the 802.11b clients from accessing the router. "802.11B/G" allows both 802.11b and 802.11g clients to access the router. "802.11B" will enable the network as an 802.11b wireless network. By default, the mode is "**802.11B/G**".

3. ESSID

You can use the default ESSID and radio channel unless more than one Palm Server Router or access points are deployed in the same area. Under this situation, it is advised that you should use a different ESSID and radio channel for each of Palm Server Router or access point in order to distinguish from each other. All of the Palm Server Routers and your wireless LAN card must have the same ESSID to allow a wireless mobile client roaming between Palm Server Routers. By default, the ESSID is set to "**Palm_Server_Router**".

4. TxRate

Select the transmission rate for the network. The default setting is **Auto**.

5. Channel

IEEE 802.11g and 802.11b devices are direct sequence spread spectrum devices that spread a radio signal over a range of frequencies. The range of frequencies used by a direct sequence device is called Channel.

The 802.11g and 802.11b specification supports up to 14 overlapping Channels for radio communication. But only 11 Channels are supported in the United States and therefore built-in on the Palm Server Router. To minimize interference, configure each of the Palm Server Router to use Non-overlapping channels. Non-overlapping channels have 25 MHz separation beginning at the first allowed channel for the country (for the US and most of Europe, channel 1, 6 & 11 are used.)

Make sure that the Palm Server Router sharing the same Channel (or Channels close in number) is as far away from each other as possible, based on the results of your site survey of the facility. You can find the site survey utility in the Palm Server Router's setup CD. By default, the channel is "**6**".

6. Hide SSID

This term is used to increase the security level. Check it to hide SSID information against the wireless clients that are sniffing radio. By default, this option is inactive.

7. TxPreamble

The default **TxPreamble** setting is Long (if you use high traffic networks should use the shorter preamble type)

8. Beacon Interval

Beacons are packets sent by an access point to synchronize a wireless network. Specify a beacon interval value. Default (100) is recommended.

9. RTS Threshold

This value should remain at its default setting of 2346. If you encounter inconsistent data flow, only minor modifications to the value range between 256 and 2346 are recommended

10. Authentication Mode

Four authentication methods are supported: Open and Shared. Select **Open**, your wireless network would be intruded by anonymous. Not only your network bandwidth would be shared; but also transmitting data might be intercepted. Select **Shared** function and it can be taken effect.

11. Encrypt Type - WEP

There are two types of encrypt type can be selected, including WEP and WPA.

WEP Encryption: Enabling WEP can protect your data from eavesdroppers. If you do not need this feature, select “None” to skip the following setting. The Palm Server Router supports both 64-bit and 128-bit encryption using the Wired Equivalent Privacy (WEP) algorithm. Select the type of encryption you want to use (64 or 128 bit) and configure one to four WEP Keys. The “1280bit” method is more secure than the “64-bit”.

Key Type: For 64bits WEP key, either 5 ASCII characters or 10 hexadecimal digitals leading by **0x** can be entered. For 128bits WEP key, either 13 ASCII characters or 26 hexadecimal digits leading by **0x** can be entered.

Note: 128 bits WEP is most secure, but has more encryption/decryption overhead. Note that all wireless devices must support the same WEP encryption bit size and have the same key. Four keys can be entered here, but only one key can be selected at a time. The keys can be entered in ASCII or Hexadecimal. Select the item from drop-down list you wish to use.

Pass phrase: Automatically generate four WEP keys. A WEP key is either 10 or 26 hexadecimal digits (0~9, a~f, and A~F) based on whether you select 64 bit or 128 bit in the WEP drop-down menu. Type a combination of up to 64 letters, numbers, or symbols in the blank, the Palm Server Router uses an algorithm to generate four WEP keys for encryption. If you want to type in the keys manually, leave this filed blank.

Note: This function eases users from having to remember their passwords. But this isn't as secure as manual assignment.

WEP Key: At most four keys can be set. A WEP key is either 10 or 26 hexadecimal digits (0~9, a~f, and A~F) based on whether you select 64 bit or 128 bit in the WEP drop-down list. The Palm Server Router must have at least the same default key.

Encryption : WEP	
WEP Encryption :	128 bits
Key Type :	HEX
<input checked="" type="radio"/> WEP Key 1 :	<input type="text"/>
<input type="radio"/> WEP Key 2 :	<input type="text"/>
<input type="radio"/> WEP Key 3 :	<input type="text"/>
<input type="radio"/> WEP Key 4 :	<input type="text"/>
<input type="button" value="Apply"/> <input type="button" value="Cancel"/>	

12. Encrypt Type - WPA

The WPA encrypts each frame transmitted from the radio using the pre-shared key (PSK) which entered from this panel or a key got dynamically through 802.1x.

WPA-PSK (TKSP): Allow the access from WPA clients simultaneously and the encryption keys are given from PSK respectively.

WPA Rekey Timer: Allows for the session keys to be refreshed over time, minimizing the amount of data that is encrypted with the same session key.

ASCII: The 8~63 ASCII characters can be entered, for example, "0123456789ABCD...."

Encryption : WPA	
WPA Encryption :	<input checked="" type="radio"/> WPA-PSK (TKIP) <input type="radio"/> Radius with 802.1x
WPA Rekey Timer :	60 sec(default:60, 0 to disable rekey)
WPA-PSK (Pre-Shared Key)	
ASCII :	<input type="text"/> (8~63 ASCII)
<input type="button" value="Apply"/> <input type="button" value="Cancel"/>	

Radius with 802.x: Check this circle to enable Radius client function.

WPA Rekey Timer: Allows for the session keys to be refreshed over time, minimizing the amount of data that is encrypted with the same session key.

RADIUS Server IP: The IP address of RADIUS server.

RADIUS Server Port: The UDP port number that the RADIUS server is listed. The default value is 1812.

Shared Secret: The RADIUS server and client share a secret that is used to authenticate the messages sent between them. You must configure both sides to use the same shared secret.

Encryption : WPA	
WPA Encryption :	<input type="radio"/> WPA-PSK (TKIP) <input checked="" type="radio"/> Radius with 802.1x
WPA Rekey Timer :	<input type="text" value="60"/> sec(default:60, 0 to disable rekey)
Radius with 802.1x	
RADIUS Server IP :	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>
RADIUS Server Port :	<input type="text"/> (0~65535, default:1812)
Shared Secret :	<input type="text"/> (longer than 8 ASCII characters)
<input type="button" value="Apply"/> <input type="button" value="Cancel"/>	

13. Apply & Cancel

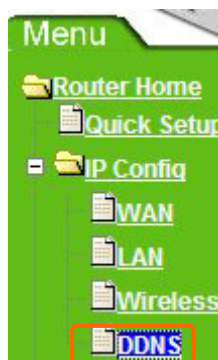
Click on **Apply** button to save the settings. If you want to clear the settings, please click on **Cancel** button. The functional button, **Cancel** can take effect after clicking on **Apply** button.

Wireless Configuration	
MAC Address : 00:14:85:d0:bc:03	
Wireless :	<input type="text" value="AP/Bridge"/>
Wireless Mode :	<input type="text" value="802.11B/G"/>
ESSID :	<input type="text" value="Palm_Server_Router"/>
TxRate :	<input type="text" value="Auto"/>
Channel :	<input type="text" value="11"/>
Hide SSID :	<input type="radio"/> ON <input checked="" type="radio"/> OFF
TxPreamble :	<input checked="" type="radio"/> Long <input type="radio"/> Short
Beacon interval :	<input type="text" value="100"/> msec(20~999, default:100)
RTS Threshold :	<input type="text" value="2346"/> (256~2346, default:2346)
Authentication Mode :	<input checked="" type="radio"/> OPEN <input type="radio"/> SHARED
Encrypt Type :	<input type="text" value="WEP"/>
<input type="button" value="Apply"/> <input type="button" value="Cancel"/>	

Encryption : WEP	
WEP Encryption :	128 bits
Key Type :	HEX
<input checked="" type="radio"/> WEP Key 1 :	<input type="text"/>
<input type="radio"/> WEP Key 2 :	<input type="text"/>
<input type="radio"/> WEP Key 3 :	<input type="text"/>
<input type="radio"/> WEP Key 4 :	<input type="text"/>
WDS	
Enable / Disable	MAC
<input type="checkbox"/>	<input type="text"/> : <input type="text"/> : <input type="text"/> : <input type="text"/> : <input type="text"/> : <input type="text"/>
<input type="checkbox"/>	<input type="text"/> : <input type="text"/> : <input type="text"/> : <input type="text"/> : <input type="text"/> : <input type="text"/>
<input type="checkbox"/>	<input type="text"/> : <input type="text"/> : <input type="text"/> : <input type="text"/> : <input type="text"/> : <input type="text"/>
<input type="checkbox"/>	<input type="text"/> : <input type="text"/> : <input type="text"/> : <input type="text"/> : <input type="text"/> : <input type="text"/>
<input type="button" value="Apply"/> <input type="button" value="Cancel"/>	

3.3.4 DDNS

Dynamic DNS allows you to make an assumed name as a dynamic IP address to a static hostname. Please configure the dynamic DNS below. Please select **DDNS** under the **IP Config** menu, and follow the instructions below to enter the **DDNS** setting page to configure the settings you want.



1. Service Provider

Choose correct Service Provider from drop-down list, here including dyndns, dhs, ods and tzo embedded in the Palm Server Router.

2. Enable / Disable DDNS

Select enable to use DDNS function. Each time your IP address to WAN is changed, and the information will be updated to DDNS service provider automatically.

3. Host Name

This field represents the host name you register to Dynamic-DNS service and expect to export to the world.

4. User Name

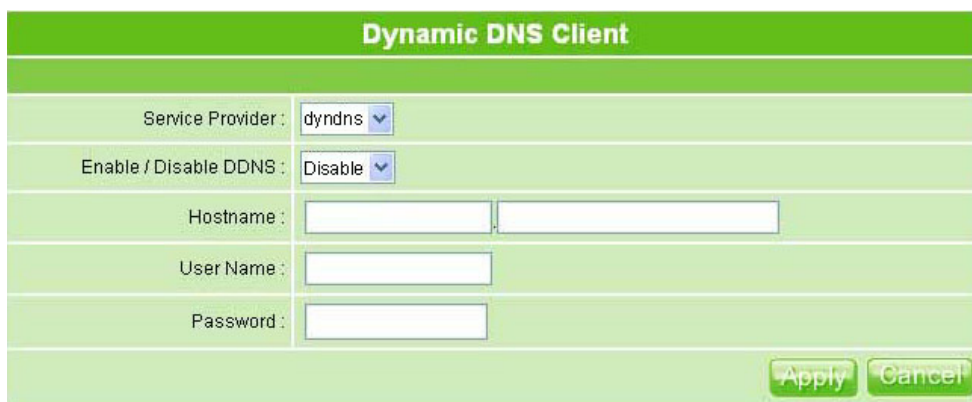
User name is used as an identity to login Dynamic-DNS service.

5. Password

Password is applied to login Dynamic-DNS service.

6. Apply & Cancel

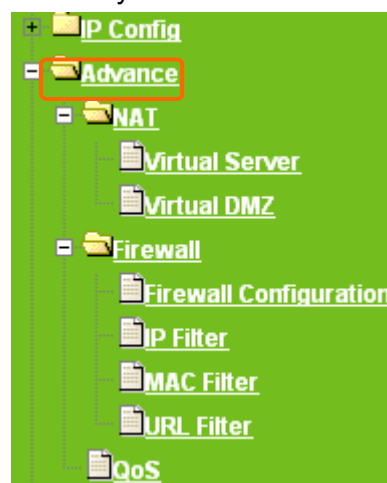
Click on **Apply** button to continue. Click on **Cancel** button to clean the setting on this page.



The image shows a web-based configuration form titled "Dynamic DNS Client". It has a light green background with a darker green header. The form contains several fields: "Service Provider" with a dropdown menu set to "dyndns", "Enable / Disable DDNS" with a dropdown menu set to "Disable", "Hostname" with a text input field, "User Name" with a text input field, and "Password" with a text input field. At the bottom right, there are two buttons: "Apply" and "Cancel".

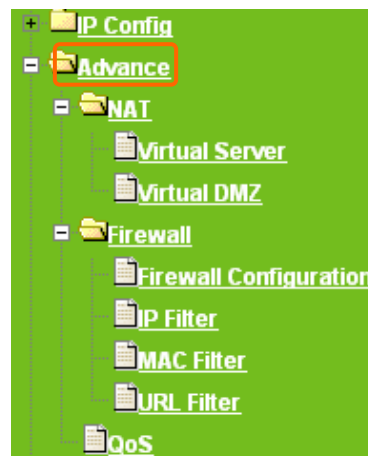
3.4 Advanced

There are NAT settings, Firewall setting and QoS setting included in advance setup. The advanced setting is in Router Mode only.



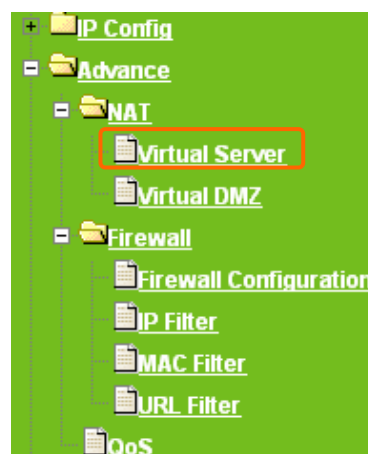
3.4.1 NAT

NAT is a method of mapping one or more IP addresses and/or services ports into different specified services, where NAT stands for Network Address Translation. It allows the internal IP addresses of many computers on a Local Area Network (LAN) to be translated to one public address, saving users' cost. It also plays a security role by obscuring the true IP addresses of important machines from potential hackers on the Internet. For convenience, we called a router having the NAT facility as a NAT-enabled router.



3.4.1.1 Virtual Server

To offer services, like WWW, FTP, provided by a server in your local network accessible for outside users, you should specify a local IP address to the server. Then, add the IP address and network protocol type, port number, and name of the service in the following list. Based on the list, the gateway will forward service request from outside users to the corresponding local server.



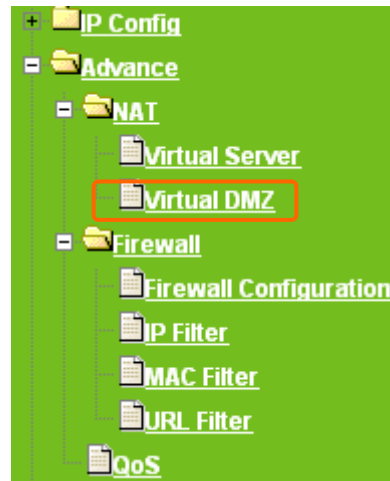
1. **Enable Virtual Server:** Check “**Enable**” to apply all those rules in Virtual Server List into the Palm Server Router.
2. **Description:** Enter the description of the virtual server, this field allows you to record what this rule is used for.
3. **Private IP:** Specify the private IP address of the internal host offering the service.
4. **Protocol Type:** Specify the transport layer protocol (TCP or UDP).
5. **Private Port:** Specify the private port number of the service offered by the internal host.
6. **Public Port:** Specify the private IP address of the internal host offering the service.
7. **Schedule:** Set up the schedule for server.
8. **Add:** Click on “Add” button to record this setting.
9. **Apply & Cancel**

Click on **Apply** button to add the settings into the list table. Click on **Cancel** button to clear the settings on this page.

Virtual Server Configuration						
Virtual Server is used to allow Internet users to access LAN services:						
Enable/Disable Virtual Servers :		<input type="radio"/> Enable <input checked="" type="radio"/> Disable				
Description :		<input type="text"/>				
Private IP :		<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>				
Protocol Type :		TCP <input type="button" value="v"/>				
Private Port :		<input type="text"/> (MIN:0 MAX:65535 Range: xxxxxx)				
Public Port :		<input type="text"/> (MIN:0 MAX:65535 Range: xxxxxx)				
Schedule :		<input checked="" type="radio"/> Always <input type="radio"/> From <input type="button" value="Sun"/> <input type="button" value="00"/> <input type="button" value="00"/> to <input type="button" value="Sun"/> <input type="button" value="00"/> <input type="button" value="00"/>				
						<input type="button" value="Add"/>
						<input type="button" value="Apply"/> <input type="button" value="Cancel"/>
Virtual Server List						
ID	Status	Description	Private IP	Protocol(private/public)	Schedule	Edit/Delete

3.4.1.2 Virtual DMZ

Virtual DMZ allows you to expose one computer to Internet, so that all inbound packets will be redirected to the computer you set. It is useful while you run some applications that use uncertain incoming ports. Please use it carefully.



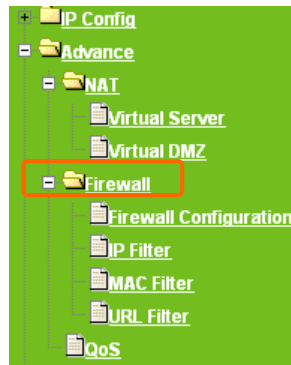
1. **Enable/Disable Virtual DMZ:** Check “**Enable**” to apply Virtual DMZ for the Router.
2. **IP Address:** This field stands for the destination IP address that you like to redirect the matched packet to.
3. **Apply & Cancel**

Click on **Apply** button to continue. Click on **Cancel** button to clean the setting on this page.

A screenshot of the 'Virtual DMZ' configuration page. The title 'Virtual DMZ' is at the top in a green bar. Below it, there is a section 'Enable/Disable Virtual DMZ:' with two radio buttons: 'Enable' and 'Disable'. The 'Disable' button is selected. Below this is the 'IP Address:' field, which consists of four input boxes separated by dots. At the bottom right, there are two buttons: 'Apply' and 'Cancel'.

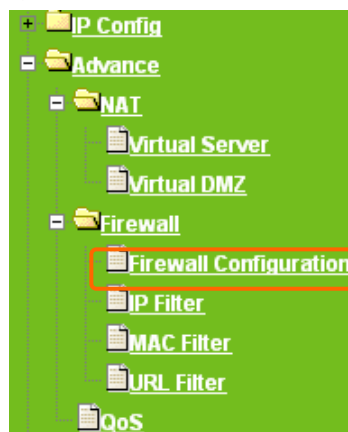
3.4.2 Firewall

The Firewall function helps to protect your local network against attacks from outside. It also provides a way of restricting users on the local network from accessing the Internet. Additionally, it can filter out specific packets to trigger the router to place an outgoing connection.



3.4.2.1 Firewall Configuration

The Palm Server Router provides built-in firewall functions, enabling you to protect the system against denial of service (DoS) attacks and other types of malicious accesses to your LAN while providing Internet access sharing at the same time. You can also specify how to monitor attempted attacks, and who should be automatically notified.



1. **Firewall Protection Level:** Select the level from the drop-down list, including High, Medium and Low. The below screen including SPI service and ICMP setting will change according to your level setup.
2. **Enable SPI Service:** The Palm Server Router often monitor a wider range of activity, such as patterns of traffic and the type of application sending traffic. With SPI, the router looks at individual packets for patterns similar to known hacker techniques, such as Denial of Service (DoS) attacks, Ping of Death (illegal ping packet sizes or excessive ICMP messages), SYN Flood, LAND Attack, and IP Spoofing. Enable it if you need.
3. **Blocking ICMP Ping from WAN side:** The purpose of ICMP is to provide feedback regarding the network and datagram, it is not to make IP a reliable transport mechanism. ICMP messages use a basic IP datagram header with the IP data being

the ICMP message. The IP source address is that of the host or gateway sending the ICMP message with the destination IP address being that of the original source IP address. You can enable ICMP Ping from WAN side or not.

4. DoS Attacks Blocking Settings

Enable DoS Attacks Blocking: The following sections will explain in more detail about DoS Defense setup by using the web configuration. There are a total 8 kinds of defense function for the DoS Defense Setup. By default, the DoS Defense functionality is disabled. Further, once the DoS Defense functionality is enabled, the default values for the threshold and timeout values existing in some functions are set to 300 packets per second and 10 seconds, respectively. A brief description for each item in the DoS defense function is shown below.

SYN Flooding: Check or uncheck this option to enable or disable protection against SYN Flood attacks. This attack involves sending connection requests to a server, but never fully completing the connections. This will cause some computers to get into a “suck state” where they cannot accept connections from legitimate users. (“SYN” is short for SYNchronize”; this is the first step in opening an Internet connection). You can select this box if you wish to protect the network from TCP SYN flooding.

WinNuke: Check or un-check this option to enable or disable protection against WinNuke attacks. Some older versions of the Microsoft Windows OS are vulnerable to this attack. If the computers in the LAN are not updated with recent versions/patches, you are advised to enable this protection by checking this check box.

MIME Flood: Check or un-check this option to enable or disable protection against MIME attacks. You can select this box to protect the mail server in your network against MIME flooding.

FTP Bounce: Check or un-check this option to enable or disable protection against FTP bounce attack. In its simplest terms, the attack is based on the misuse of the PORT command in the FTP protocol. An attacker can establish a connection between the FTP server machine and an arbitrary port on another system. This connection may be used to bypass access controls that would otherwise apply.

IP Unaligned Time-Stamp: Check or un-check this option to enable or disable protection against unaligned IP time stamp attack. Certain operating systems will crash if they receive a frame with the IP timestamp option that isn’t aligned on a 32-bit boundary.

Sequence Number Prediction Check: For TCP packets, sequence number is used to guard against accidental receipt of unintended data and malicious use by the attackers if the ISN (Initial Sequence Number) is generated randomly. Forged packets with valid sequence numbers can be used to gain trust from the receiving host. Attackers can then gain access to the compromised system. Note that this attack affects only the TCP packets originated or terminated at the Internet Security Router.

Sequence Number Out of Range Check: Protect against TCP out of range sequence number attacks. An attacker can send a TCP packet to cause an intrusion detection system (IDS) to become unsynchronized with the data in a connection. Subsequent frames sent in that connection may then be ignored by the IDS. This may indicate an unsuccessful attempt to hijack a TCP session.

ICMP Verbose: Check or un-check this option to enable or disable protection against ICMP error message attacks. ICMP messages can be used to flood your network with undesired traffic.

Max IP Fragment Count: Enter the maximum number of fragments the Firewall should allow for every IP packet. This option is required if your connection to the ISP is through PPPoE. This data is used during transmission or reception of IP fragments. When large sized packets are sent via the Palm Server Router, the packets are chopped into fragments as large as MTU (Maximum Transmission Unit). By default, this number is set to 45. If MTU of the interface is 1500(default for Ethernet), then there can be a maximum of 45 fragments per IP packet. If the MTU is less, then there can be more number of fragments and this number should be increased.

Minimum IP Fragment Size: Enter the Minimum size of IP fragments to be allowed through Firewall. This limit will not be enforced on the last fragment of the packet. If the Internet traffic is such that it generates many small sized fragments, this value can be decreased. This can be found if there are lots of packet losses, degradation in speed and if the following log message is generated very often: "fragment of size less than configured minimum fragment size detected".

5. Apply & Cancel

Click on **Apply** button to continue. Click on **Cancel** button to clear the settings on this page.

6. DoS Attacks Blocking List

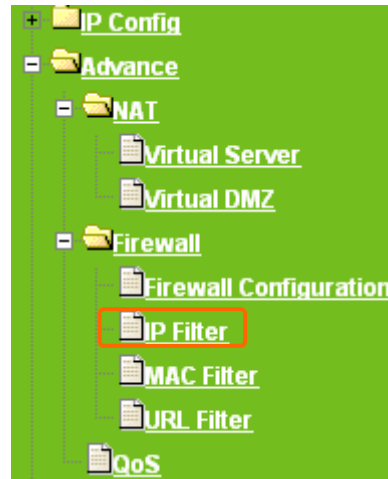
The list shows all the DoS attacks blocking items.

Firewall	
General	
Firewall Protection Level :	Low
Enable SPI Service :	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Blocking ICMP Ping from WAN Side :	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
DoS Attacks Blocking Settings	
Enable DoS Attacks Blocking :	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
SYN Flooding :	<input type="checkbox"/>
WinNuke :	<input type="checkbox"/>
MIME Flood :	<input type="checkbox"/>
FTP Bounce :	<input type="checkbox"/>
IP Unaligned Time-stamp :	<input type="checkbox"/>
Sequence Number Prediction Check :	<input type="checkbox"/>
Sequence Number Out-of-Range Check :	<input type="checkbox"/>
ICMP Verbose :	<input type="checkbox"/>
Max IP Fragment Count :	0
Minimum IP Fragment Size :	0
<input type="button" value="Apply"/> <input type="button" value="Cancel"/>	

DoS Attacks Blocking List	
IP Reassembly Attacks	Bonk, Boink, Teardrop(New Tear), Overdrop, Opentear, Syndrop, Jolt
ICMP Attacks	Ping of Death, Smurf, Twinge
Flooders	ICMP Flooder, UDP Flooder
Port Scans	TCP XMAS Scan, TCP Null Scan, TCP SYN Scan, TCP Stealth Scan
Protection with PF Rules	Echo-Chargen, Ascend Kill
Miscellaneous Attacks	IP Spoofing, LAND, Targa, Tentacle

3.4.2.2 IP Filter

Use IP Filter to deny LAN IP addresses from accessing the Internet. You can deny specific port numbers or all ports for the specific IP address.



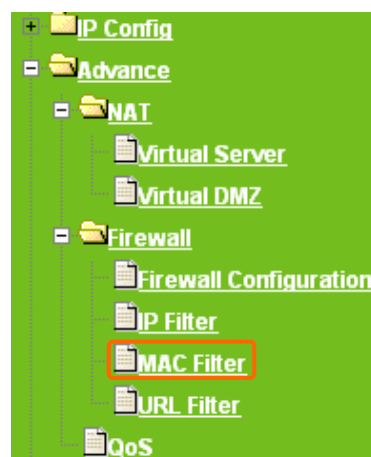
1. **Enable IP Filter:** Check enable or disable to apply IP Filter function.
2. **Enable Log:** All packets between WAN and LAN will be logged.
3. **Source:** To specify the appropriate IP address / mask and enter the source port number.
4. **Destination:** Allows you to set the destination address / mask to which this rule should apply and enter the source port number.
5. **In/Out:** Select inbound or outbound ACL (Access Control List) rules, you can control (allow or deny) incoming or external network access to computers on your LAN.
6. **Protocol:** This option allows you to select protocol type. Available settings are TCP, UDP and ICMP.
7. **Listen:** To check if a computer is on the Internet. It sends ping packets and listens for replies from the specific host.
8. **Time Ranges:** Apply IP filter by setting time ranges.
9. **Action:** Select Deny, the IP filter will deny for above time range, otherwise, to allow IP filter in above time.
10. **Side:** Set the IP filter from LAN or WAN, or you may select both side.
11. **Add, Apply & Cancel:**

After finish above setting, click **Add** button to create the new ACL rule. Click on **Apply** button to add the settings into the list table. Click on **Cancel** button to clear the settings on this page.

IP Filter Configuration	
IP Rule	
Enable IP Filter :	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Enable Log :	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Source :	Address/Mask <input type="text"/> Port <input type="text"/>
Destination :	Address/Mask <input type="text"/> Port <input type="text"/>
In/Out :	<input checked="" type="radio"/> In <input type="radio"/> Out
Protocol :	<input checked="" type="radio"/> TCP <input type="radio"/> UDP <input type="radio"/> ICMP
Listen :	<input checked="" type="radio"/> Yes <input type="radio"/> No
Time Ranges	
Day of Week :	<input checked="" type="checkbox"/> Sun <input checked="" type="checkbox"/> Mon <input checked="" type="checkbox"/> Tue <input checked="" type="checkbox"/> Wed <input checked="" type="checkbox"/> Thu <input checked="" type="checkbox"/> Fri <input checked="" type="checkbox"/> Sat
Start From :	<input type="text"/> : <input type="text"/>
End to :	<input type="text"/> : <input type="text"/>
Action :	<input checked="" type="radio"/> Deny <input type="radio"/> Allow
Side :	LAN <input type="button" value="v"/>
<input type="button" value="Add"/>	
<input type="button" value="Apply"/> <input type="button" value="Cancel"/>	
IP Filter List	
Status	Source
Destination	Time Ranges
Rule	Action
Side	Edit/Delete

3.4.2.3 MAC Filter

Use MAC filters to deny LAN computers by their MAC addresses from accessing the Internet. You can manually add a MAC address that is currently connected to the Palm Server Router.



- MAC Filter Action:** To deny or allow all MAC filter action.

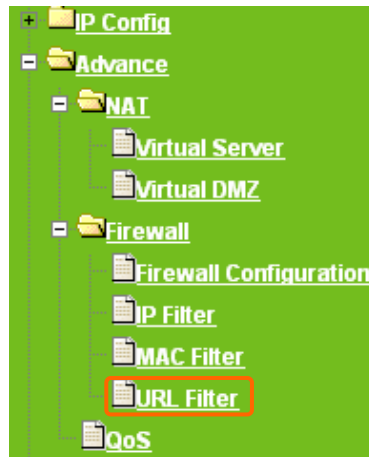
2. **Enable MAC Filter:** Check enable or disable to apply MAC Filter function.
3. **Enable Log:** All packets between WAN and LAN will be logged.
4. **Description:** Enter the filter description into this blank.
5. **MAC Address:** Enter the MAC address manually that you want to filter.
6. **Time Ranges:** Apply MAC filter by setting time ranges.
7. **Add, Apply & Cancel**

After finish above setting, click **Add** button to create the MAC configuration rule. Click on **Apply** button to add the settings into the list table. Click on **Cancel** button to clear the settings on this page.

MAC Filter Configuration					
MAC Filter Action :	DenyALL <input type="button" value="v"/>				<input type="button" value="OK"/>
Enable MAC Filter :	<input type="radio"/> Enable <input checked="" type="radio"/> Disable				
Enable Log :	<input type="radio"/> Enable <input checked="" type="radio"/> Disable				
General					
Description :	<input type="text"/>				
MAC Address :	<input type="text"/>	:	<input type="text"/>	:	<input type="text"/>
Time Ranges					
Day of Week :	<input checked="" type="checkbox"/> Sun	<input checked="" type="checkbox"/> Mon	<input checked="" type="checkbox"/> Tue	<input checked="" type="checkbox"/> Wed	<input checked="" type="checkbox"/> Thu
	<input checked="" type="checkbox"/> Fri	<input checked="" type="checkbox"/> Sat			
Start From :	<input type="text" value="00"/>	:	<input type="text" value="00"/>		
End to :	<input type="text" value="23"/>	:	<input type="text" value="59"/>		
					<input type="button" value="Add"/>
					<input type="button" value="Apply"/> <input type="button" value="Cancel"/>
MAC Filter List					
ID	Status	Description	MAC Address	Time Ranges	Edit/Delete

3.4.2.4 URL Filter

Keyword based URL (Uniform Resource Locator) filtering allows you to define one or more keywords that should not appear in URL's. Any URL containing one or more of these keywords will be blocked. This is a policy independent feature i.e. it cannot be associated to ACL rules. This feature can be independently enabled / disabled, but works only if firewall is enabled.



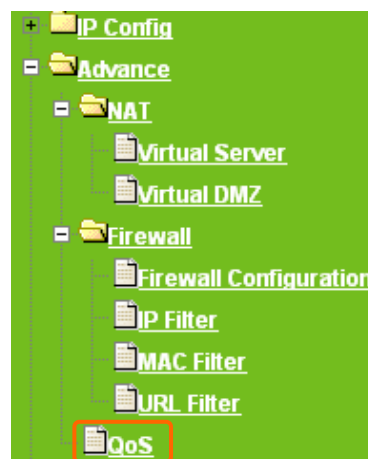
1. **Enable URL Filter:** Check enable or disable to apply URL filter function.
2. **Enable log:** All packets between WAN and LAN will be logged.
3. **Description:** Enter the filter description into this blank.
4. **URL keyword:** Enter the URL words into this blank to apply filter blocking, example: "www.yahoo", then it'll block all the websites from www.yahoo range.
5. **Time Ranges:** Apply URL filter by setting time ranges.
6. **Add, Apply & Cancel**

After finish above setting, click **Add** button to create the URL rule. Click on **Apply** button to add the settings into the list table. Click on **Cancel** button to clear the settings on this page.

URL Filter Configuration	
Enable URL Filter :	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Enable Log :	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
General	
Description :	<input type="text"/>
URL Keyword :	<input type="text"/>
Time Ranges	
Day of Week :	<input checked="" type="checkbox"/> Sun <input checked="" type="checkbox"/> Mon <input checked="" type="checkbox"/> Tue <input checked="" type="checkbox"/> Wed <input checked="" type="checkbox"/> Thu <input checked="" type="checkbox"/> Fri <input checked="" type="checkbox"/> Sat
Start From :	<input type="text" value="00"/> : <input type="text" value="00"/>
End to :	<input type="text" value="23"/> : <input type="text" value="59"/>
<input type="button" value="Add"/>	
<input type="button" value="Apply"/> <input type="button" value="Cancel"/>	
URL Filter List	
ID	Status
Description	URL Keyword
Time Ranges	Edit/Delete

3.4.3 QoS

Quality of Service (QoS) refers to the capability of a network to provide better service to selected network traffic over various technologies, including Frame Relay, Asynchronous Transfer Mode (ATM), Ethernet and 802.1x networks, and IP-routed networks that may use any or all of these underlying technologies. The primary goal of QoS is to provide priority including dedicated bandwidth, controlled jitter and latency (required by some real-time and interactive traffic), and improved loss characteristics. Also important is making sure that providing priority for one or more flows does not make other flows fail. QoS technologies provide the elemental building blocks that will be used for future business applications in campus, WAN and service provider networks. This chapter provides each setting of QoS.

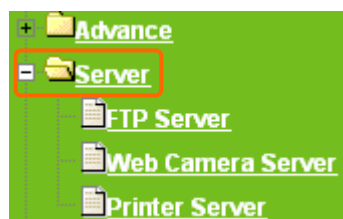


1. **Enable QoS Service:** One checkbox appears to activate the QoS control function or not. Click it to force the router to perform QoS control over traffic flows. By default, it's enabled.
2. **Current Upstream Bandwidth:** Allows you to set the upper bound of the port forwarding rate. It will be of great value to minimize the impact on other users from one user who would otherwise monopolize the network transmission bandwidth (e.g. playing games or downloading large files).
3. **Priority:** To limit the bandwidth consumed over a backbone link by FTP transfers or give priority to an important database access. And the following applications can be selected individually and distribute the priority level.
4. **Application:** Including FTP, HTTP, E-mail, Telnet, Voice, Games, IM and Video priority setting.
5. **Apply & Cancel**
Click on **Apply** button to save the setting. Click on **Cancel** button to clear the settings on this page.

Quick Setup - QoS Configuration		
Enable QoS Service : <input checked="" type="radio"/> Enable <input type="radio"/> Disable		
Current Upstream Bandwidth : <input type="text" value="2048"/> (Kbps, default:100000 Kbps, MAX:100000 Kbps)		
Priority		
High :	<input type="text" value="60"/> (%)	
Medium :	<input type="text" value="30"/> (%)	
Low :	<input type="text" value="10"/> (%)	
Application		
Status	Description	Priority
<input type="button" value="Enable"/> ▾	FTP	<input type="button" value="Medium"/> ▾
<input type="button" value="Enable"/> ▾	HTTP	<input type="button" value="High"/> ▾
<input type="button" value="Enable"/> ▾	E-mail	<input type="button" value="Low"/> ▾
<input type="button" value="Enable"/> ▾	Telnet	<input type="button" value="Medium"/> ▾
<input type="button" value="Enable"/> ▾	Voice: H323, SIP	<input type="button" value="High"/> ▾
<input type="button" value="Enable"/> ▾	Games: MSDirectPlay, Battle.Net, Quake2(Doom3), Unreal(CS)	<input type="button" value="High"/> ▾
<input type="button" value="Enable"/> ▾	IM: AOL(ICQ), MSN , Yahoo	<input type="button" value="High"/> ▾
<input type="button" value="Enable"/> ▾	Video: RTSP	<input type="button" value="Low"/> ▾
<input type="button" value="Back"/> <input type="button" value="Next"/> <input type="button" value="Exit"/>		

3.5 Server

The Palm Server Router provides FTP Server, Web Camera Server and Printer Server application.



3.5.1 FTP Server

By directly connecting USB storage devices to any USB port, FTP server can be created with simple configuration. FTP Server utility allows both local and remote users to upload or download files, pictures or MP3 music from the same storage device in most easy and timely fashion. It is also cost effective where users do not need to purchase a dedicated PC to set up a 24 hours FTP service.

Before configure FTP Server, please make sure the storage device is properly plug into any USB port on the router and make sure this USB storage device is detected by the router.



1. **Enable FTP Server:** The Enable for FTP Server only can be selected when USB storage device plugged.
2. **Enable Anonymous to Login:** Allow anonymous to login after check on enable.
3. **Enable FTP Access from WAN:** Allow FTP access from WAN side by checking on Enable for this item.
4. **FTP Server Port:** Define the FTP command transfer service port. If you want to change this port number, also remember to change the service port setting of your FTP client.
5. **Idle connection Time-Out:** When a specific time value is added, FTP Server will be de-activated if it has no activity within the time limit.
6. **Apply & Cancel**
Click on **Apply** button to continue. Click on **Cancel** button to clear the settings on this page.

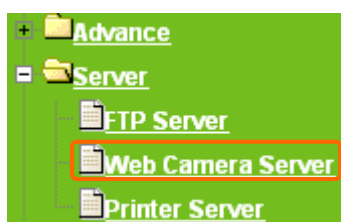
Notice: FTP server is compatible with FAT32 or EXT2 format USB storage device. In case you need to format your USB storage device. Please always make sure the device is formatted with FAT32 or EXT2 standard.

FTP Server	
Enable FTP Server :	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Enable Anonymous to Login :	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Enable FTP Access from WAN :	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
FTP Server Port :	<input type="text" value="21"/>
Idle Connection Time-Out :	<input type="text" value="300"/> Seconds(MIN: 60 default: 300)
<input type="button" value="Cancel"/>	

User Account List		
User Name	Status	Opened Directory / File
jacky	Offline	
Trista	Offline	

3.5.2 Web Camera Server

The Palm Server Router has built-in Web Cam Server. By connecting web camera to the router, it allows user to monitor their home or office from remote locations. Motion Detection function also been built-in and allows user to use webcam to detect any motion at their home or office and send email alert with captured images.



3.5.2.1 Web Camera Server Basic Setting

1. **Enable Webcam Server:** Allow using this function by checking on enable.
2. **Access from WAN:** Allow webcam can access from WAN side by checking on enable for this item.
3. **Image format:** There are CIF & QCIF format can be selected for webcam.
4. **Preview:** Click on this button, you can preview the image from webcam.

5. **Record Setting:** Please see the detail advance setting in “3.5.2.2 Web Camera Server Advanced Configuration”.

6. **Apply & Cancel**

Click on **Apply** button to continue. Click on **Cancel** button to clear the settings on this page.

Web Camera Server	
Enable webcam server :	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Access from WAN :	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Image format :	<input type="text" value="CIF"/> <input type="button" value="Preview"/>
<input type="button" value="Record Setting"/>	
<input type="button" value="Apply"/> <input type="button" value="Cancel"/>	

3.5.2.2 Web Camera Server Advanced Configuration

Click on “**Record Setting**” button, and the screen will appear as below.

1. **Enable save image:** If you want to save the image from webcam, please check on enable.
2. **Save image interval:** For saving image, you can set the save interval time, the default value is 5 seconds.
3. **Save Location:** Set the save location for webcam image, you may save into USB HDD or remote FTP; if select save to remote FTP, please continue following remote FTP setting.
4. **USB HDD Directory:** The section provides option of which folder should be used for saving webcam image.
5. **Remote FTP URL:** Input the FTP URL for saving webcam image.
6. **Remote FTP port:** Input the FTP port number under URL to save image.
7. **Remote FTP user:** Enter the user’s name you like and it will be used to save the webcam image into the FTP server.
8. **Remote FTP Directory:** To provide option of which folder should be used for saving webcam image.
9. **Back:** Click on **Back** button for returning to Webcam Basic Setting screen.
10. **Apply & Cancel**

Click on **Apply** button to continue. Click on **Cancel** button to clear the settings on this page.

Webcam Advanced Configuration	
Snapshot Record Settings	
Enable save image :	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Save image interval :	<input type="text" value="5"/> sec (default: 5)
Save Location :	<input type="radio"/> USB HDD <input checked="" type="radio"/> Remote FTP
USB HDD Directory :	<input type="text" value="/ftp/webcam_recorded_files/"/>
Remote FTP URL :	<input type="text"/>
Remote FTP port :	<input type="text"/>
Remote FTP user :	<input type="text"/>
Remote FTP password :	<input type="text"/>
Remote FTP Directory :	<input type="text"/>
<input type="button" value="Back"/>	
<input type="button" value="Apply"/> <input type="button" value="Cancel"/>	

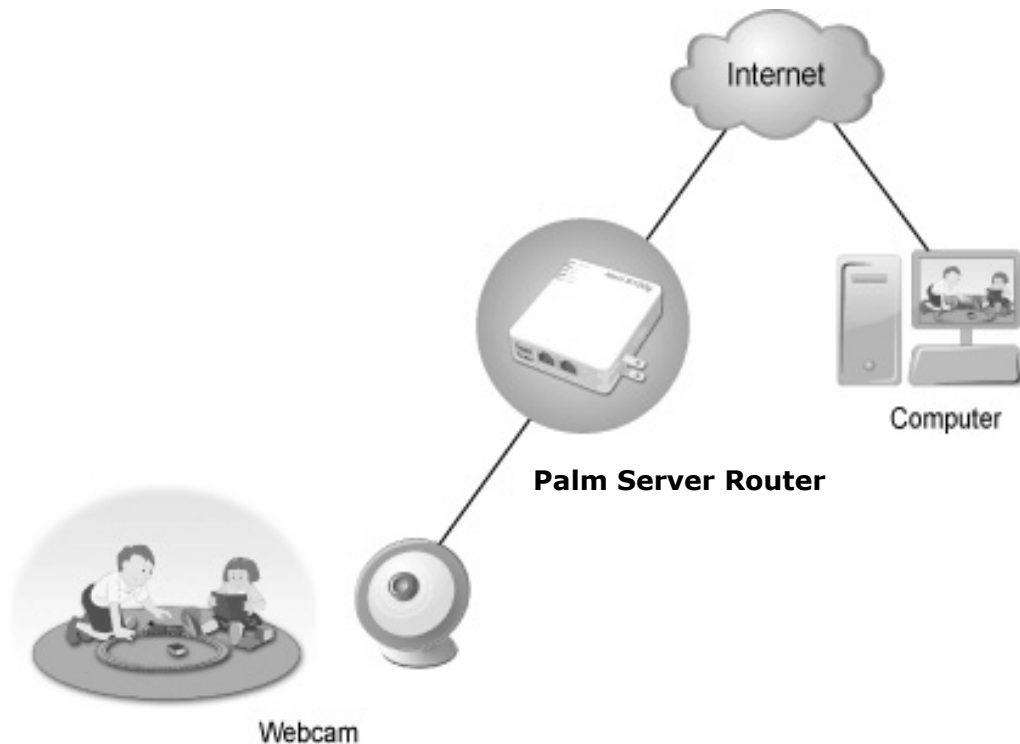
3.5.2.3 Application for Web Camera

3.5.2.3.1 Web Camera Monitoring application

Monitor your home with a Webcam via the Palm Server Router. Take pictures or video via the Palm Server Router, also can do the monitoring or recording all images into the USB HDD for reviewing. Often marketed as surveillance tools for home or office security, network Webcams are now being employed by early adopters for more personal matters, such as watching kids and monitoring pets. The Webcam can be remotely accessed and controlled via a browser. Besides, to record and monitor live action with USB webcam, also can view the image through Internet browsers or WiFi mobile phones.

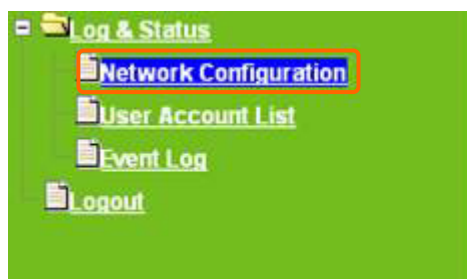
3.5.2.3.1.1 Web Camera Monitoring via WAN connecting

For viewing the image via webcam from WAN connecting, below is the diagram.



- **How to check your WAN IP address**

To monitor the image via webcam from outside door, you need to know the WAN IP address. Select “**Network Configuration**” under **Log & Status** in main **Menu** after connection, and you will see the WAN IP Address which used to connect to webcam screen. Here use 192.168.1.110 as an example.



WAN	
MAC Address:	00:d0:68:01:bd:0e
Mode:	Dynamic IP
Status:	CONNECTION !
IP Address:	192.168.1.110

- **Monitor the image via webcam from WAN**

Input the WAN IP Address (as you see in above screen) into browser blanks, and you will see the personal account login screen appear then input your own user account and password. After login by personal, your will see the personal control panel screen as below, please click on **“My Webcam”**.

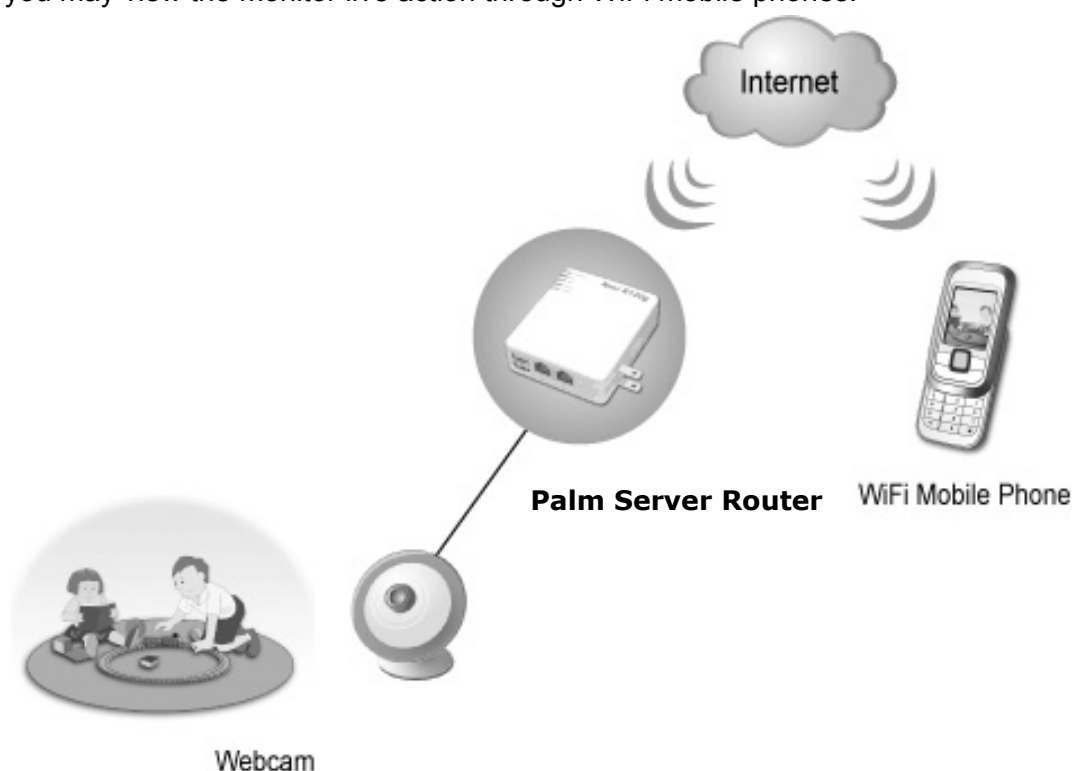


There will pop-up screen shows the image from web camera as example below.



3.5.2.3.1.2 Web Camera Monitoring via WiFi mobile phone

Also, you may view the monitor live action through WiFi mobile phones.



Please fill the WAN IP address plus “/webcam.html” (ex: <http://210.64.134.25/webcam.html>) into the mobile phone's browser blank and you will see the webcam user login screen appear.



Router Mode	
Username :	<input type="text"/>
Password :	<input type="password"/>
<input type="button" value="Login"/>	

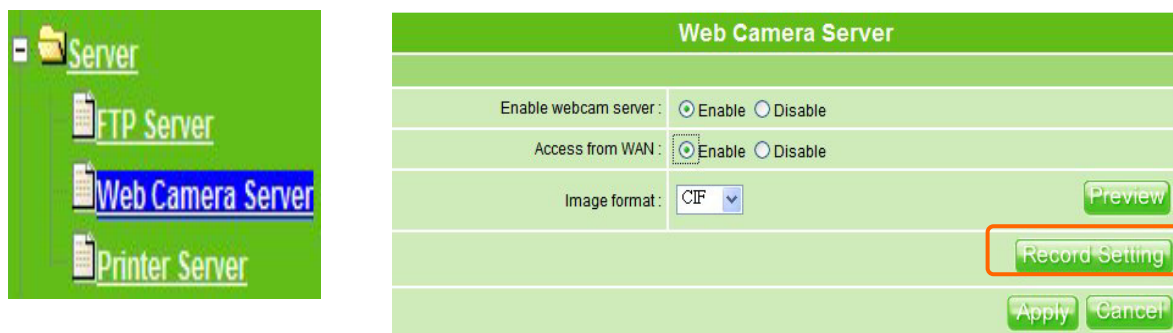
After login by your own account, you will see the monitor image from web camera via WiFi mobile phone.



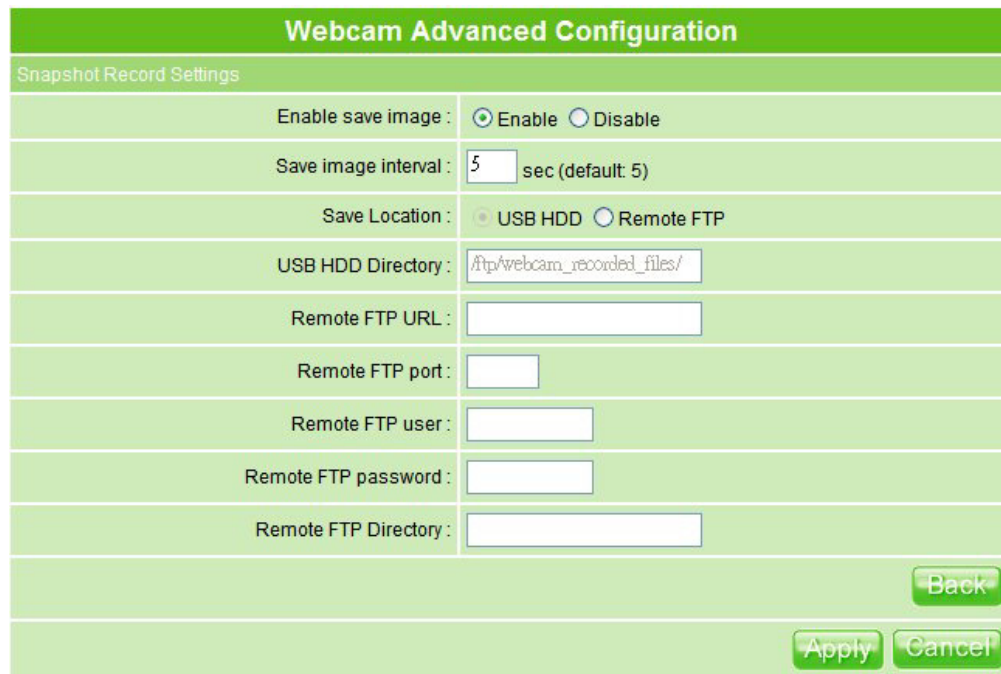
3.5.2.3.2 Web Camera Recording

3.5.2.3.2.1 Administrator setting

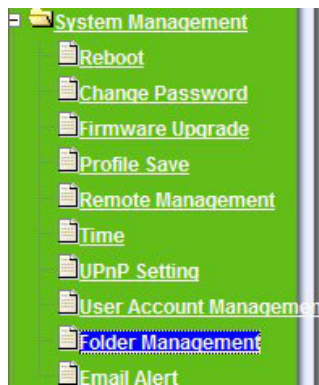
The Palm Server Router also can record the pictures from Webcam; only **Administrator** can activate the settings. Select **Web Camera Server** from main **Menu** and enable this function, click on **Record Setting** button for further setting.



To set up the Webcam Advanced Configuration for each text box, the image from webcam will be recorded into your USB HDD or Remote FTP, please refer to User Manual for the detail setting. Click on **Apply** after setup finished.



For administrator, you may view all the images from webcam recording, please select Folder Management and click on **Disk Explorer** to view entire folder inside the disk including webcam record files.



USB Disk Management

You can specify which USB storage to be System Disk.

USB Device Name

SysDisk	Disk	TYPE	Capacity	Free Space
<input type="radio"/>	USB A	FAT16	251 MB	N/A

Disk Explorer **OK**

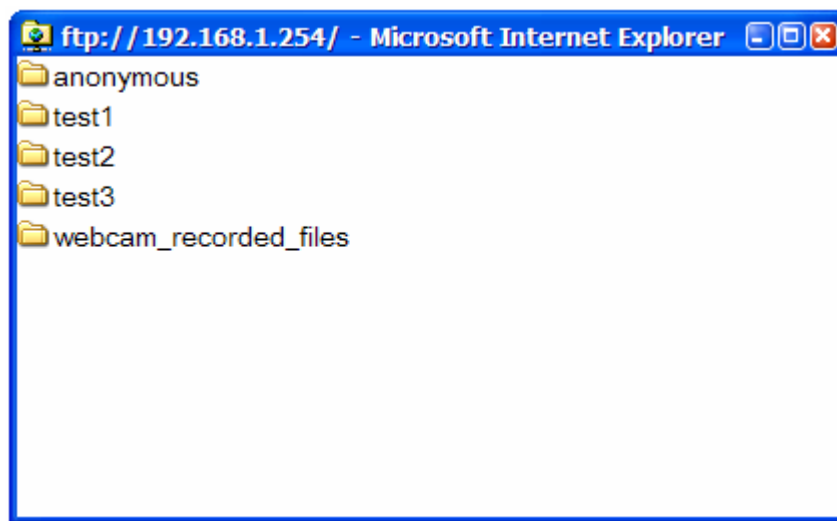
Partition / Format SysDisk

All existing data and partitions on the HDD will be DESTROYED ! Make sure you really need to do this !

TYPE ☒ EXT3 ☐ FAT32

Format

After click on **Disk Explorer**, you will see the folder screen appear including all the folders inside the Palm Server Router. (Below is the example.)



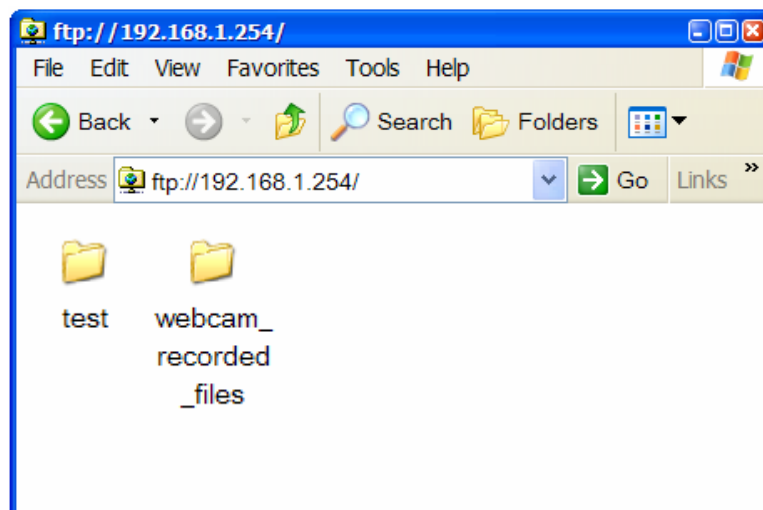
For getting the images from web camera or any files inside router, you may copy the files into your own HDDs directly.

Personal application

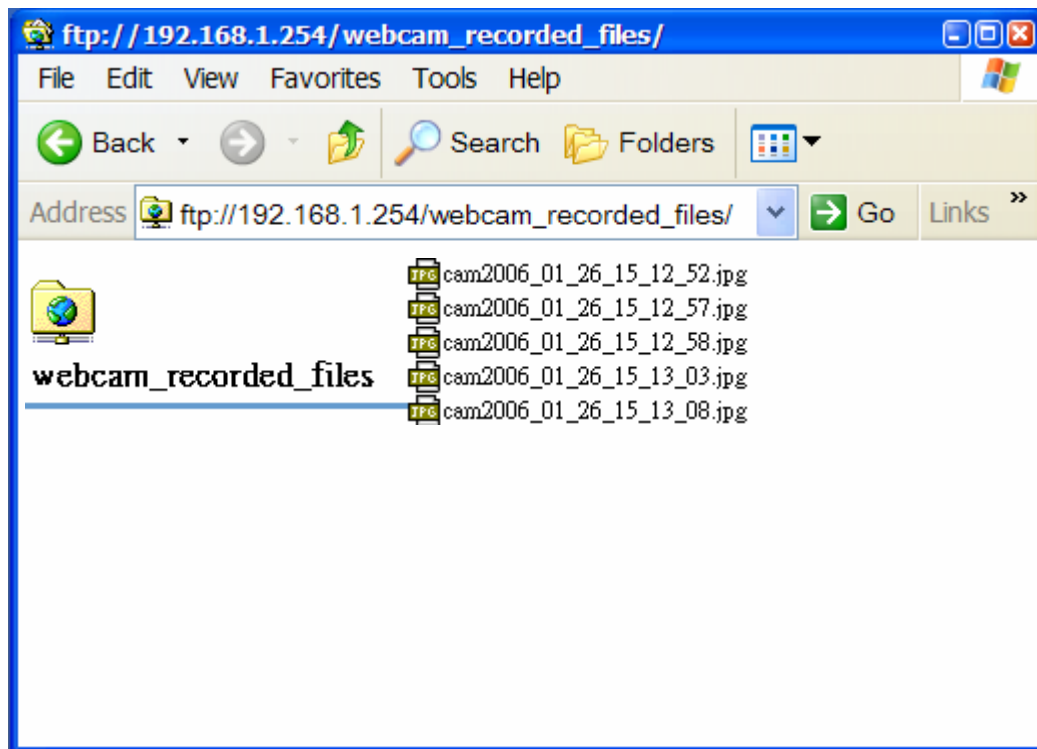
All the users under administrator's setting can view entire webcam recording images from My Document. Please login by your own personal account. For viewing your own folder, please click on **"My Document"**.



After click on **"My Document"**, you will see below folder screen appear.



All the image files will be saved into the folder of "webcam_recorded_files", please click into the folder for checking.

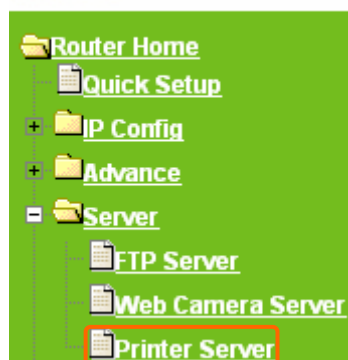


Notice: If you can't open the folder inside the FTP router, please check with administrator to set up your FTP & Webcam's right.

3.5.3 Printer Server

The Palm Server Router has two USB ports for connecting with printers to be shared on the local area network. Follow the steps to set up your PC to connect to a printer server.

MENU ...



1. **Enable Printer Server:** Check enable for applying printer server.
2. **Enable Printer Access From WAN:** Allow printer can access from WAN side by checking on enable for this item.

3. **Printer Model:** The printer model will be shown when plug the USB printer.
4. **Printer Name:** Enter the name of printer you like.
5. **Printer Description:** Enter the description of printer as your demand.
6. **Apply & Cancel**

Click on **Apply** button to continue. Click on **Cancel** button to clear the settings on this page.

Printer Sever Configuration	
Enable Printer Server:	<input checked="" type="radio"/> Enable <input type="radio"/> Dsable
Enable Printer Access From WAN:	<input type="radio"/> Enable <input checked="" type="radio"/> Dsable
Printer Model:	HP Photosmart 2600 series
Printer Name:	1180
Printer Description:	123
<input type="button" value="Apply"/> <input type="button" value="Cancel"/>	

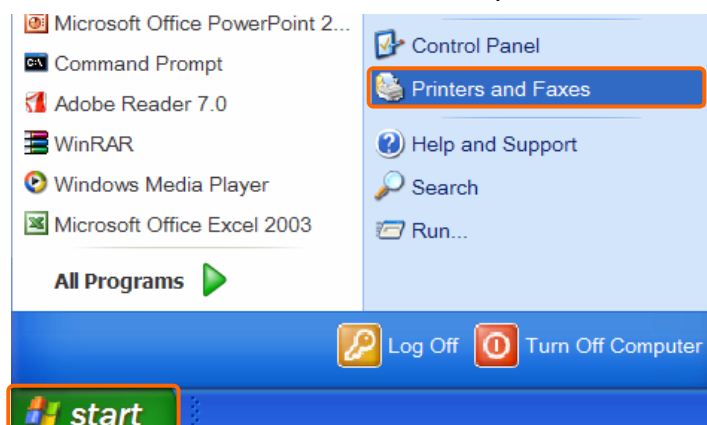
Besides above setting finished, the printer setting on PC also needs to be set as follows.

3.5.3.1 Printer Setting on PC

After Enable Printer Server in Quick Setup and Printer Server Configuration, please follow the steps to set the detail **LPR** settings in your PC. (The example below is for Windows XP platform.)

Step 1:

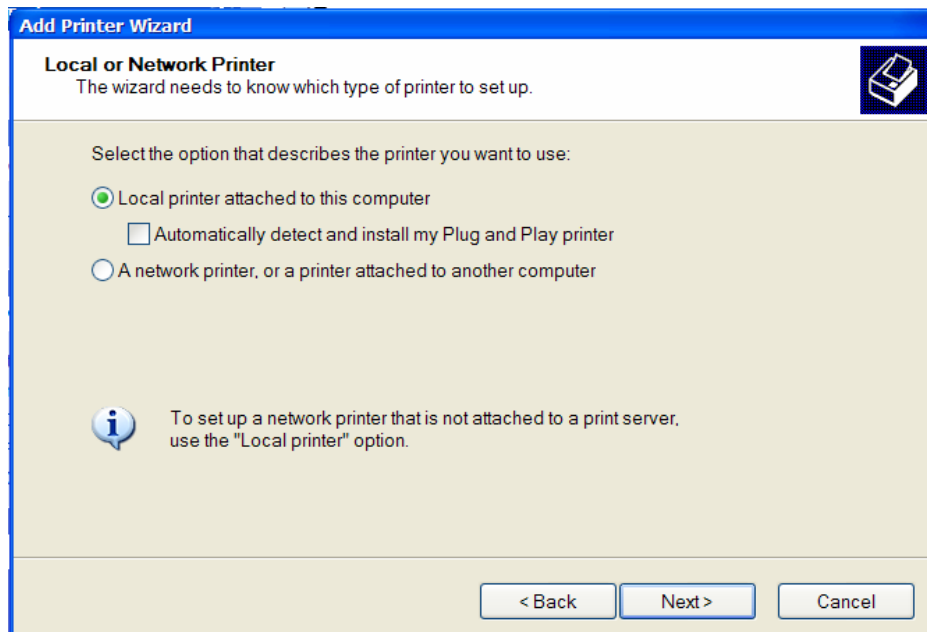
After setting USB printer in Palm Server Router's setting screen, please go to **Start > Printers and Faxes** to add a printer.



Then, please pay attention to the next steps. It points out only the important settings.

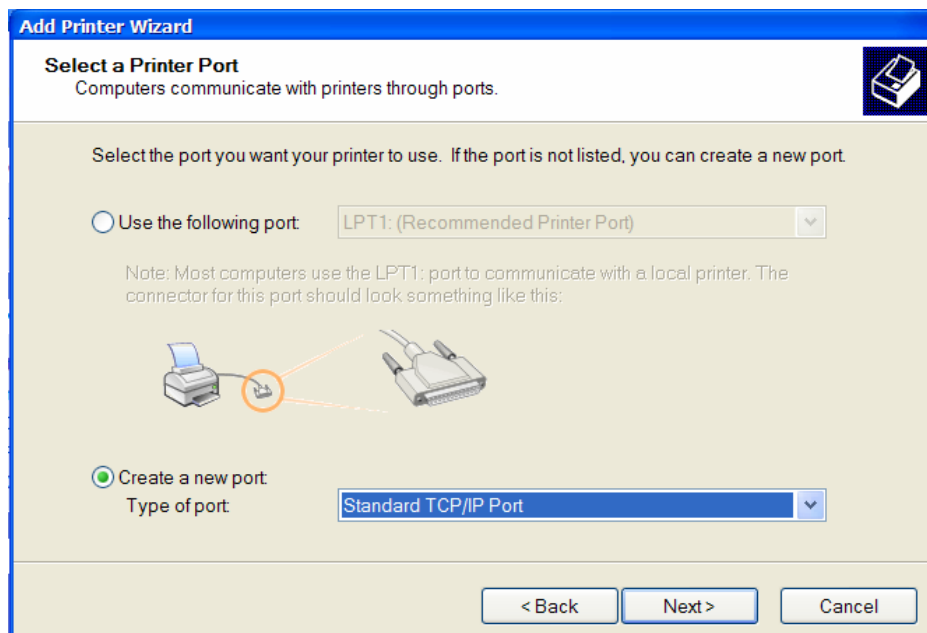
Step 2:

Select **Local printer attached to this computer**, and then click on **Next** button.



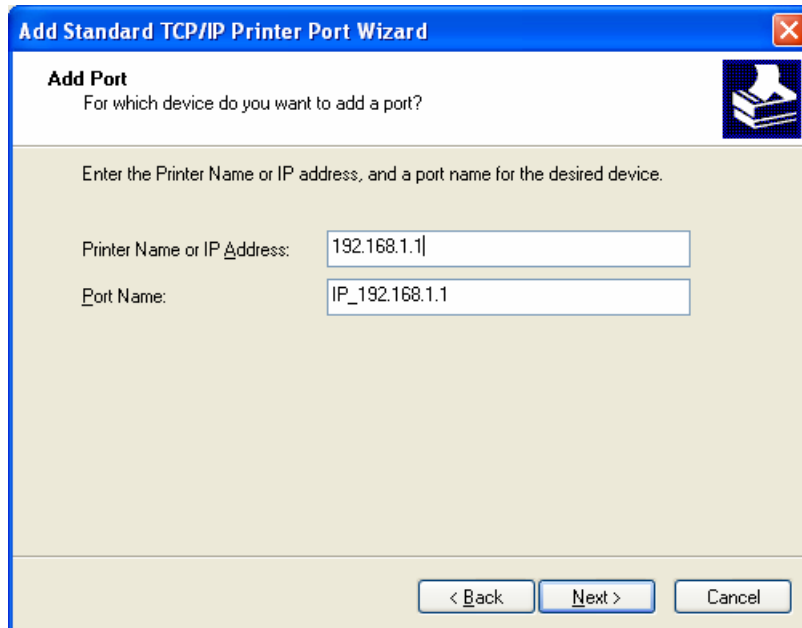
Step 3:

Select **Create a new port** and choose **Standard TCP/IP Port** from drop-down list, and then click on **Next** button.



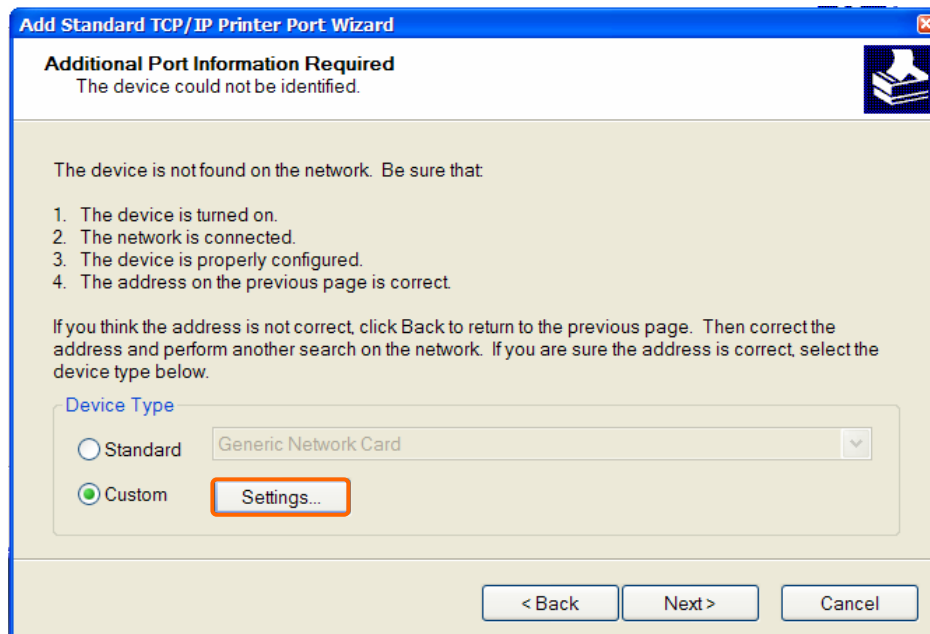
Step 4:

Input your Palm Server Router's address: **192.168.1.1** and click on **Next** button.



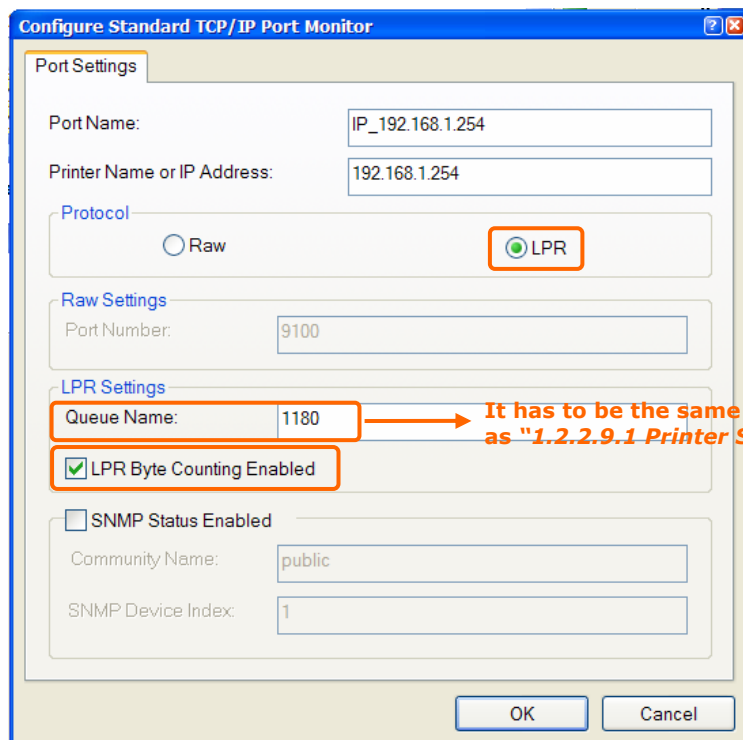
Step 5:

Select **Custom** and click on **Settings...** button to set the detail setting.



Step 6:

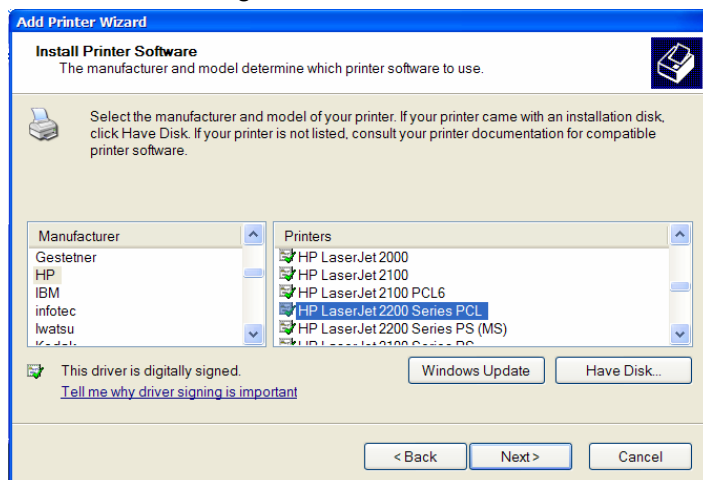
Select **LPR** and give it the same **Queue Name** as USB Printer Name as shown, and mark **LPR Byte Counting Enabled**. Finally, click on **Next** button.



Before click on **Finish** button on the next screen after the aforesaid settings, you have to set the printer's driver as well.

Step 7:

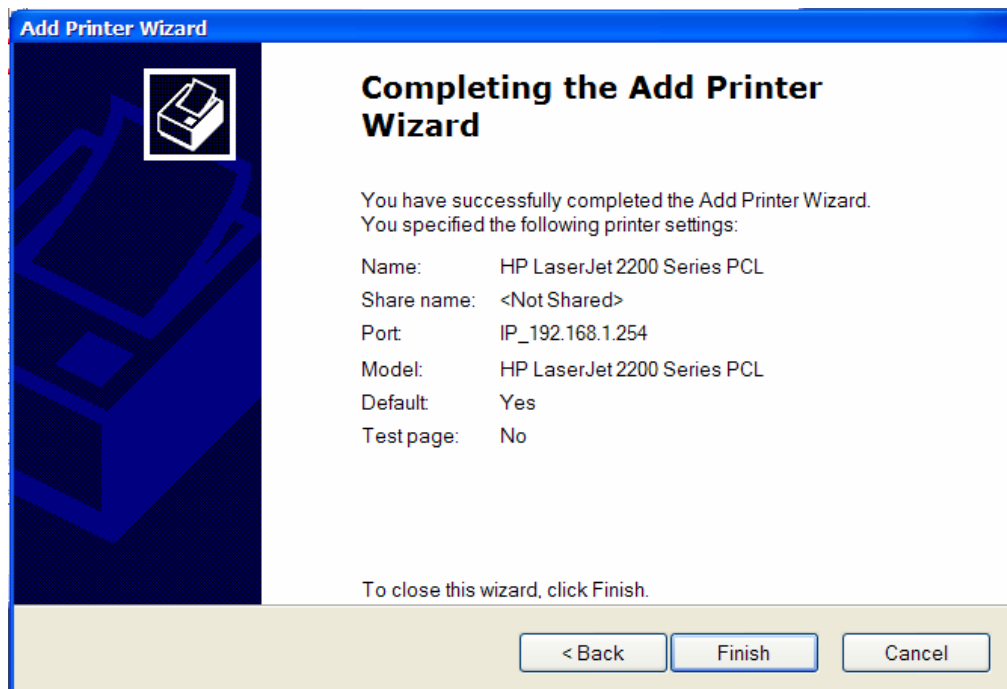
Select the **Manufacturer** and **Printers**. If your printer is not listed in the table, please install its driver CD and then click on **Have Disk...** button for installation. Or click on **Next** button to finish the setting.



You can name your printer, set it as default printer and share your printer as the next screen shown, the **Printer Server** setting is getting finally.

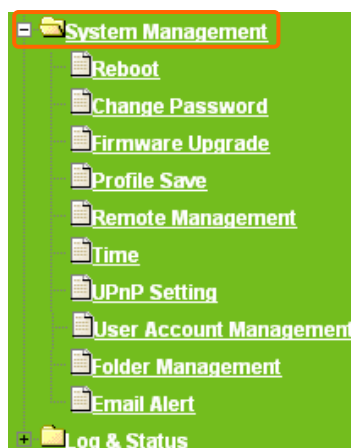
Step 8:

Click on **Finish** button and all steps of setting printer server are completely.



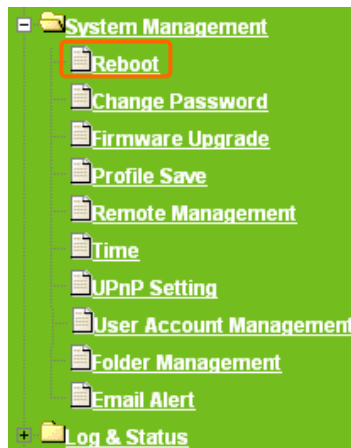
3.6 System Management

The Palm Server Router provides system management including password changing, firmware upgrade, time setting, user's account setting and other detail settings. Following is each setting.

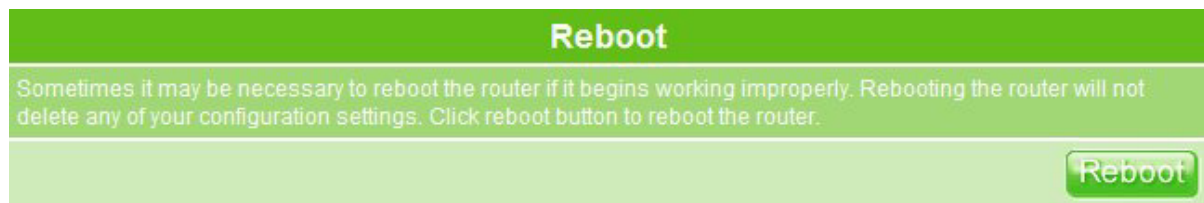


3.6.1 Reboot

If you had entered the wrong configuration while setting up your router or other utilities, you can always reboot your Palm Server Router by this setting.

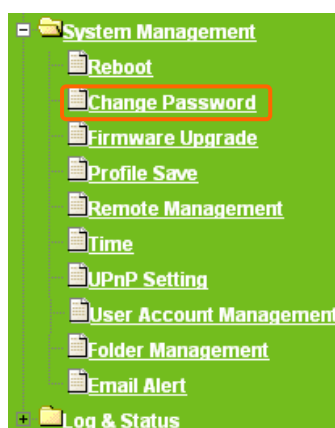


It's necessary to reboot the router if it begins working improperly, please click on Reboot button to reboot the router.



3.6.2 Change Password

At this section, the administrator can change the system password. Only the password can be changed, the username for administrator is “admin” and can’t be changed anymore.



1. **Old Password:** Enter the original password you set.
2. **New Password:** Enter the new password you want to change.
3. **New Password (Confirm):** Enter the new password again for confirming.
4. **Apply & Cancel** Click on **Apply** button to continue. Click on **Cancel** button to clear the settings on this page.



Change Password

The router ships with no password. You may set a password or change your current password in this page.

Login : admin

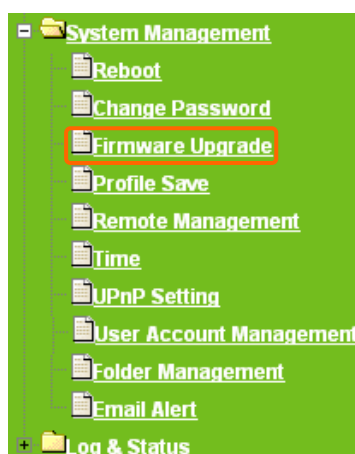
Old Password :

New Password :

New Password (Confirm) :

3.6.3 Firmware Upgrade

You can upgrade the firmware of the Palm Server Router on this page. Make sure the firmware you want to use is on the local hard drive of the computer.



1. **Update Firmware:** Click on Browse button to browse the local hard drive and locate the firmware to be used for update.
2. **OK & Cancel**
Click on **OK** button to confirm the setting finish. Click on **Cancel** button to clear the setting on this page.



Firmware Upgrade

From time to time, the product may release new versions of the router's firmware. You can click Check Firmware button to check and download up-to-date firmware and click Browser button to locate the file from your local harddisk.

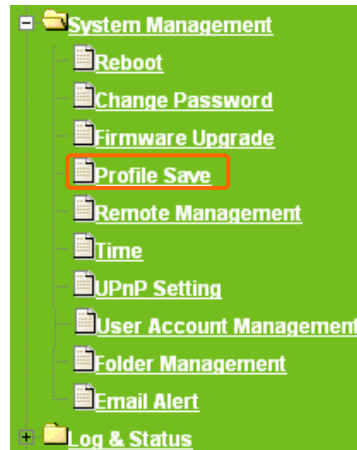
Current Firmware Version : 2.0.5_B04

Firmware Date : 2007/04/18 20:01:19

Update Firmware :

3.6.4 Profiles Save

To backup the current configuration setting or load the backup data, also you can restore the Palm Server Router to default setting by this function.

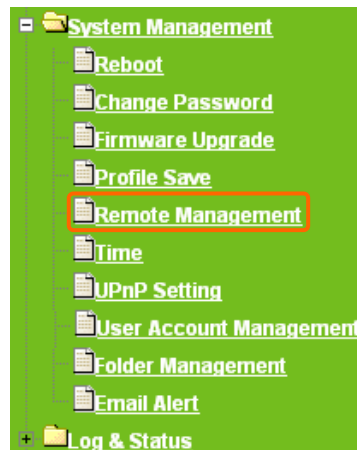


1. **Save Settings To PC:** Click on Save button for saving the configuration setting into assigned location.
2. **Load Settings From PC:** Click on Browse button for searching the saving configuration from hard drive, and then click on Load button to load all the setting into the router.
3. **Restore To Factory Default Settings:** After you have tried other methods for troubleshooting your network, you may choose to restore the Palm Server Router to the factory default settings.
4. **Apply**
Click on **Apply** button to continue.

Profiles Save	
In this page, you can save your current configuration, restore a previously saved configuration, or restore all of the settings in the router to the factory (default) settings.	
Save Settings To PC :	<input type="button" value="Save"/>
Load Settings From PC :	<input type="text"/> <input type="button" value="Browse"/> <input type="button" value="Load"/>
Restore To Factory Default Settings :	<input type="button" value="Restore"/>
<input type="button" value="Apply"/>	

3.6.5 Remote Management

Remote Management allows the Palm Server Router to be configured from the Internet by a web browser. In general, only a member of your network can browse the built-in web pages to perform “Administrator” tasks. This feature enables you to perform the tasks from the remote (Internet) host.



1. **HTTP Connection Port:** The port number used to access the router.
2. **Remote Management:** You can allow any Internet IP address to access the router, or set up deny rule according to IP setting.
3. **IP Address:** Internet IP address of the computer that has access to the router.
4. **Description:** Enter the description for the remote configuration.
5. **Add, Apply & Cancel**

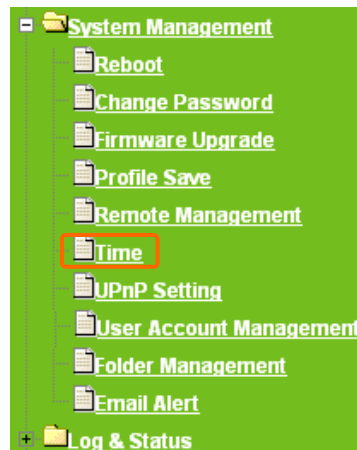
Click on **Add** button to increase the remote rule, click on **Apply** button to continue, or click on **Cancel** button to clear the settings on this page.

Remote Management	
Remote management allows you to make changes to your router's settings from specific IP address in Internet	
HTTP Connection Port :	<input type="text" value="80"/>
Remote Management :	<input type="button" value="Deny All But..."/>
IP Address :	<input type="text" value="."/> <input type="text" value="."/> <input type="text" value="."/> <input type="text" value="."/>
Description :	<input type="text"/>
<input type="button" value="Add"/>	
<input type="button" value="Apply"/> <input type="button" value="Cancel"/>	

Remote Management IP List			
ID	Description	IP Address	Edit/Delete

3.6.6 Time

The System time is the time used by the Palm Server Router for scheduling services. You can manually set the time or connect to a NTP (Network Time Protocol) server. If a NTP server is set, you will only need to set the time zone. If you manually set the time, you may also set Daylight Saving dates and the system time will automatically adjust on those dates.



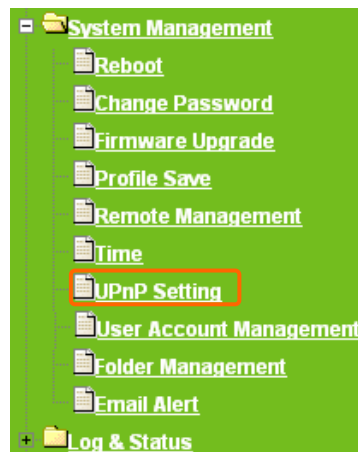
1. **Default NTP Server:** Select the NTP Server from the drop-down list.
2. **Time Zone:** Select your time zone location from the drop-down list.
3. **Daylight saving time:** If you are in daylight saving time area, please enable this item.
4. **Set the Time:** Select this item to set up time by manual, select the date and time from each drop-down list.
5. **Apply & Cancel**

Click on **Apply** button to continue, or click on **Cancel** button to clear the settings on this page.

Time Server			
Please set your time and time zone in this page.			
Local Time :	2007/06/21 Thu 10:19:14		
<input checked="" type="radio"/> Setup Time Use NTP			
Default NTP Server :	time.stdtime.gov.tw (optional)		
Time Zone :	(GMT+08:00) Beijing, Hong Kong, Singapore, Taipei		
Daylight saving time :	Disable		
<input type="radio"/> User Setup			
Set the Time :	Year : 2007	Month : Jun	Day : 21
	Hour : 11	Minute : 19	Second : 50
<input type="button" value="Apply"/> <input type="button" value="Cancel"/>			

3.6.7 UPnP Setting

UPnP allows users to connect their UPnP-enabled broadband router, printer server and other devices right to the network with zero-configuration, meaning easier setup for installing the device on the network. The automatic discovery feature enables the device to obtain an IP address, present and describe itself to other devices and PCs on the network without having to install drivers, and then configure and use those devices.



1. **Enable/Disable UPnP:** Select enable to activate this service.

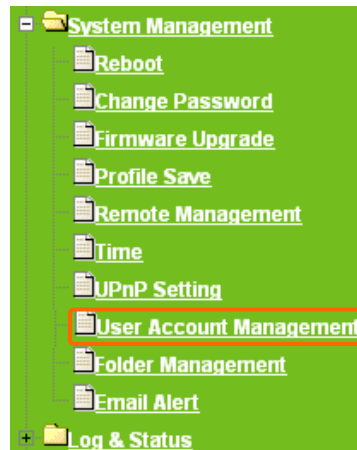
2. **Apply, Cancel**

Click on **Apply** button to add the settings into the list table. Click on **Cancel** button to clear the setting on this page.

UPnP Configuration	
In this page, you can turn on or turn off the UPnP feature of your router.	
Enable/Disable UPnP :	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
<div>Apply Cancel</div>	

3.6.8 User Account Management

Personal users can use each individual application such as My Status, My Webcam and My Document. This section is to set the user's right. Also, all the users' rights will be showed in User Account List and allowed to edit or delete by clicking the meaning text.



1. **Max Login User:** Set up the maximum users to login at the same time, select the number from drop-down list. If you want to change the maximum login users only without changing user's information, please click on **OK** button after select login user's number.
2. **User Name:** Create the user name in this blank.
3. **Password:** Set up the user's password.
4. **Group Right:** Enable the use to view the webcam's recording files.
5. **User Right:** Allow the user to monitor from webcam or use FTP server.
6. **Activated:** Click **On** to allow the user's right can be applied immediately.
7. **Add, Apply & Cancel**

After finish above setting, click **Add** button to create the user. Click on **Apply** button to add the settings into the list table. Click on **Cancel** button to clear the settings on this page.

8. User Account List

The list will show you all the user's name, password, status and right.

User Account Management

Max Login User :

10

OK

Create User Account

User Name :

Password :

Group Right :

☐ View Webcam Recorded Files

User Right :

☐ Web Camera Monitor
☐ FTP Server

Activated :

☒ On ☐ Off

Add

Apply
Cancel

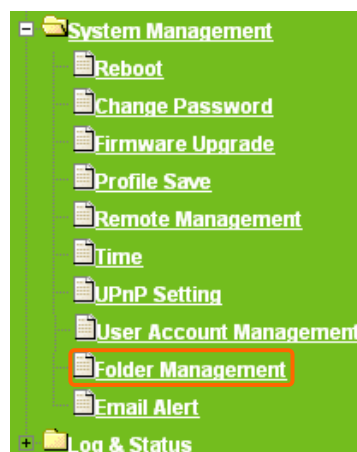
User Account List

User Name	Password	Status	Right	Edit/Delete
jacky	****	Active	FTP/Webcam/	Edit/Delete
Trista	****	Active	FTP/Webcam/	Edit/Delete

Back
Next
Exit

3.6.9 Folder Management

Easy to check all the USB storage devices connected to your Palm Server Router, view the entire data folder inside each storage devices, and you can manage the disk formatting / partition via click on the button in this page.



1. Select the USB Disk and click on **OK** button for refreshing all disks before you perform disk partition, and the **Unplug** button will appear.
2. To partition/format the disk, please select the disk and click on **Format** button.
3. Moreover, if you want to view the data inside the disk, please go to “**3.5.1 FTP Sever Setup**” to enable FTP server and then click on “**Disk Explorer**” to view all the disks folders inside the device.

Quick Setup - USB Disk Management

You can specify which USB storage to be System Disk.

USB Device Name

SysDisk	Disk	TYPE	Capacity	Free Space	
<input checked="" type="radio"/>	USB A	FAT16	251 MB	208 MB	Unplug

Disk Explorer

OK

Partition / Format SysDisk

All existing data and partitions on the HDD will be DESTROYED ! Make sure you really need to do this !

TYPE

☒ EXT3
 ☐ FAT32

Format

Back

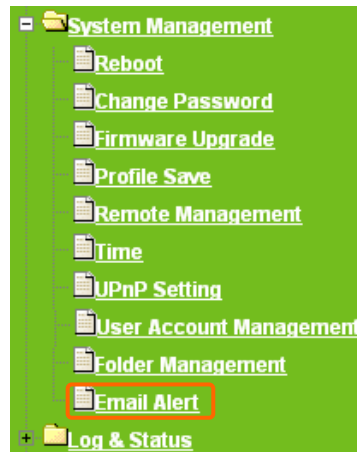
Next

Exit

Notice: You have to click on “**Unplug**” button before removing the USB devices from the Palm Server Router.

3.6.10 Email Alert

To monitor router activity, you can run on a local PC or a remote one elsewhere on the Internet. And the Palm Server Router provides the email alert facility so that the log messages can packed as an e-mail for someone who wants to receive these messages. In the following, here explains how to set up the email alert function.



1. **Email Alert:** Check the enable box to activate the email alert service.
2. **SMTP Server:** Specify an IP address of the SMTP server which can send mails from your Palm Server Router to the recipients' mailboxes directly.
3. **Your Mail (from):** Enter the email address indicated the sending location.
4. **SMTP Auth:** If the email alert needs to be sent via SMTP authentication, please check on this item, and then enter the data into the blanks of account and password.
5. **Account:** Enter the email account which you want to send the alert.
6. **Password:** Enter the email account password which you want to send to.
7. **Email Address (To):** Enter the email address you want to send the alert to.
8. **Schedule:** Arrange to send the alert when event happens or by regular time.
9. **Add, Apply & Cancel**
After finish above setting, click **Add** button to create the alert rule. Click on **Apply** button to add the settings into the list table. Click on **Cancel** button to clear the settings on this page.
10. **Refresh & Delete**
Click on Refresh button to renew the screen of login data lists, and click on Delete button to clean all log lists.

Email Alert

Logs can be sent to an email address specified by the user.

Email Alert : ☐ Enabled ☒ Disabled

SMTP Server :

Your Mail (from) :

SMTP Auth : ☐ SMTP Authentication

Account :

Password :

Email Address (To) :

Schedule : ☒ Send when event happens
☐ Send daily at :

Add

Apply Cancel

Email Alert List

SMTP Server	Account	Email Address	Schedule	Edit/Delete
-------------	---------	---------------	----------	-------------

Status & Log - System Log

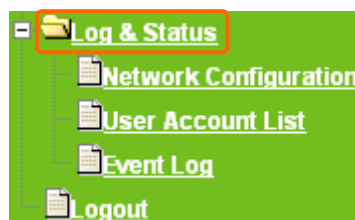
You can view logs of NES Mini Server Router activities. To update the display, click refresh button. To clear the logs, click delete.

Time	Type of Services	Description
07/06/21 10:24:17	WEB	admin Web Logout! (1 times)
07/06/21 10:24:29	WEB	trista Web login Failed! (1 times)
07/06/21 10:24:37	WEB	trista Web login Success! (1 times)
07/06/21 10:25:31	WEB	trista Web Logout! (1 times)
07/06/21 10:25:39	WEB	admin Web login failed! (1 times)
07/06/21 10:25:58	WEB	admin Web login Success! (1 times)

Refresh Delete

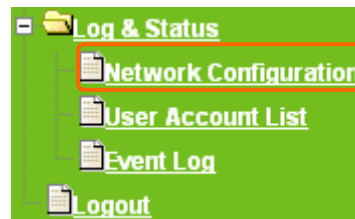
3.7 Log & Status

The Palm Server Router provides the log list and status of connection, user's account.



3.7.1 Network Configuration

Network Configuration shows all the connecting situation of LAN, WAN, Wireless and USB devices plugging.

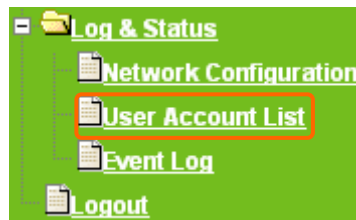


Each block shows configuration status, you may click on Refresh button to update the screen list.

Network Configuration				
Bootup Time: 29:10				
LAN				
MAC Address:	00:0e:68:00:33:d6			
DHCP Server:	192.168.110.1			
Receive bytes:	132988			
Receive packets:	781			
Transmit bytes:	567572			
Transmit packets:	679			
WAN				
MAC Address:	00:d0:68:01:bd:0e			
Mode:	Dynamic IP			
Status:	CONNECTION !			
IP Address:	192.168.1.110			
Subnet Mask:	255.255.255.0			
Default Gateway:	192.168.1.1			
DNS:	server:168.95.192.1 server2:192.168.1.1			
Receive bytes:	257140			
Receive packets:	2725			
Transmit bytes:	3702			
Transmit packets:	17			
<div>RenewRelease</div>				
Wireless				
Status:	AP Mode			
MAC Address:	00:0d:10:25:61:a4			
Mode:	MIX			
SSID:	Palm_Server_Router			
TxRate:	0 B/G			
Channel:	11			
Encrypt Type:	WEP			
Receive bytes:	0			
Receive Packets:	0			
Transmit bytes:	21557			
Transmit packets:	145			
Transmit packets:	145			
USB				
USB Port	USB Type	Name	Model	Status
				Refresh

3.7.2 User Account List

This section shows all the user's account right and status.

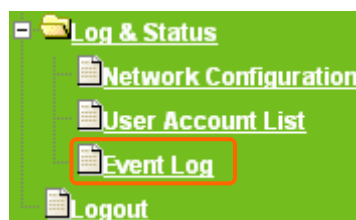


Check the user name, status and opened directory/file in this screen.

User Account List		
User Name	Status	Opened Directory / File
jacky	Offline	
Trista	Offline	

3.7.3 Event Log

The Palm Server Router provides system log data for review.

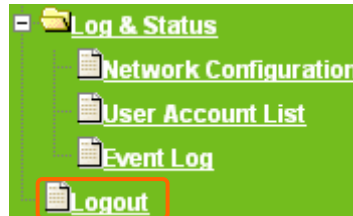


The system log detail list is shown on this screen.

Status & Log - System Log		
This page displays the logs of activities and events for the router.		
Time	Type	Message
07/06/21 10:24:17	WEB	admin Web Logout! (1 times)
07/06/21 10:24:29	WEB	trista Web login Failed! (1 times)
07/06/21 10:24:37	WEB	trista Web login Success! (1 times)
07/06/21 10:25:31	WEB	trista Web Logout! (1 times)
07/06/21 10:25:39	WEB	admin Web login failed! (1 times)
07/06/21 10:25:58	WEB	admin Web login Success! (1 times)
		Refresh

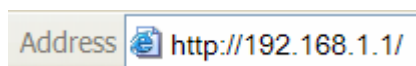
3.8 Logout

To logout the router via click on Logout button in Menu, and system will return to Login homepage as show on page 21.



3.9 Personal Configuration

Open a Microsoft Internet Explorer, Mozilla Firefox or Apple Safari browser, and enter <http://192.168.1.1> (Default Gateway) into browser's blank.



Notice: If the homepage doesn't appear, please check if the TCP/IP configuration is obtaining IP address automatically or not. If you don't know how to do, please refer to "**1.5 Get your IP Automatically & Manually**".

Home Page



Click on "**Personal Panel**" and login with your own user account. (If you don't have the right

to login, please check with administrator for setting.)



**Wireless 802.11g
Palm Server Router**

➤ Router/AP/Client

Personal Login

Username :

Password :

Login

Personal Panel

Screen shows the Personal Panel for each right under the setting by administrator.



**Wireless 802.11g
Palm Server Router**

➤ Router/AP/Client

Welcome

Personal Panel

Dear trista, Welcome! [Logout](#)



Copyright © 2007 Palm Server Router All Rights Reserved.

The Palm Server Router provides personal control panel for each user to entrance to each application screen, please click on each icon for application. The icons will be in gray color and can't be clicked if the user doesn't have the right to use that function; even there is none of right be set, the user only can apply **"My Status"**.

Notice: The authority depends on administrator's setting in **"3.6.8 User Account Management Setup"**.

3.9.1 Personal Control Panel



"My Status" shows all the login information for your personal account.

Click on **"Main Menu"** text to back to personal panel and select the other personal application.

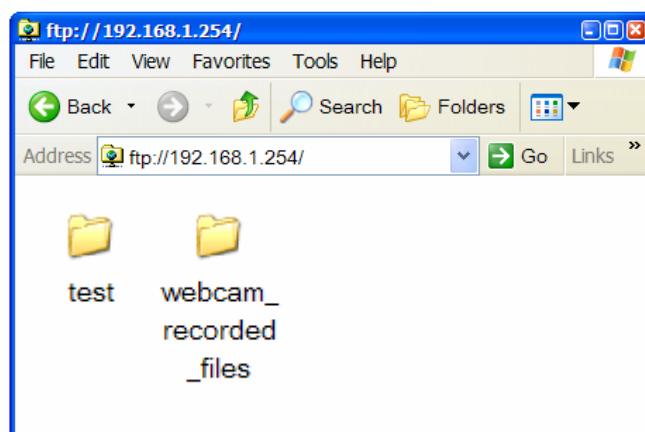
Main Menu		Logout
Activity Information		
Time	Message	
2007/06/21 10:38	Web Logout!	
2007/06/21 10:38	Web Login Success!	
		<input type="button" value="Clear"/> <input type="button" value="Refresh"/>

Notice: All above quota information is based on administrator's setting.



"My Document" will show all the files in the HDD under each user's account. Also can create the folder or copy file into web HD directly. Below description is the detail folder inside.

Click on **"My Document"** and it'll open another web page to show all the files in your own HD.



There will be “**webcam_recorded_files**” and “**Your name**” folder inside your web HD.

- “**webcam_recorded_files**” folder: All webcam images from Palm Server Router.
- “**Your name**” (here use **test** for example) folder: Each user’s data will be saved into their own folder.



“**My Webcam**” can view the on time image when turn on the web camera.

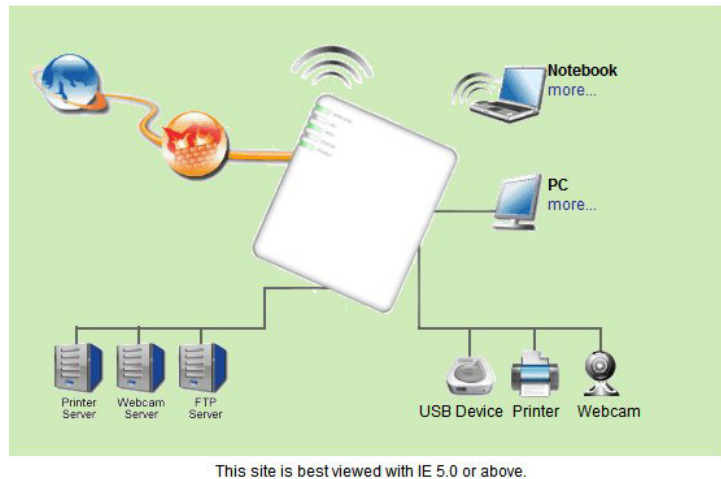
The image can be viewed by “**My Webcam**” as below example image.



Notice: If the image from webcam can’t be viewed, it may be caused by Internet security setting and needs to be corrected or installed with the Java program.

3.10 Site Map

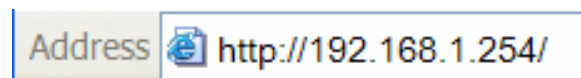
The Palm Server Router provides site map clicking for each icon to carry out the setting easily from the home page.



Chapter 4 AP Mode

Administrator Quick Setup Instruction

Make sure to switch the mode into Router Mode, then open a Microsoft Internet Explorer, Mozilla Firefox or Apple Safari browser, and enter <http://192.168.1.254> (Default Gateway) into browser's blank.



Notice: If the homepage doesn't appear, please check if the TCP/IP configuration is obtaining IP address automatically or not. If you don't know how to do, please refer to section "**1.5 Get your IP Automatically & Manually**" on page 11.

Home Page



Please click on **Administrator** button to login to set up at first time, also can change any settings in the future. Only the Administrator has the right to set and change all settings.

User Name and Password

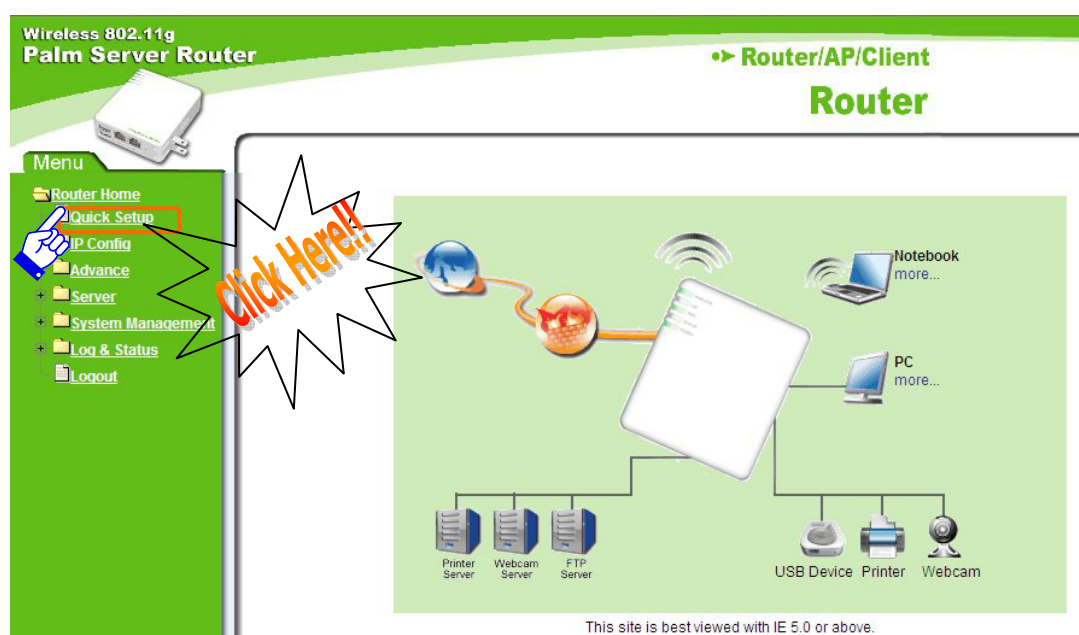
The image shows the 'Administrator Login' section of the web interface. It has a green header with the product name and 'Router/AP/Client' mode. Below the header is a white router device. The main section is titled 'AP Mode' and contains a 'Username' field, a 'Password' field, and a green 'Login' button.

The factory default values for User Name and Password are “**admin**” and “**admin**” (all in lowercase letters).

Notice: Only the password can be changed, please read setup “**3.2.12 Password Setup**” or “**3.6.2 Change Password**”. In order to protect your own settings, it's strongly recommended to change the password before you finish the Router Basic Setup.

Quick Setup

Typical Configuration Manager Page consists of two separate frames. The left frame contains all the means available for device configuration. Menus are indicated by file icons, and related menus are grouped into categories, such as LAN, WAN and etc., and indicated by folder icon, depending on whether the group of menus are expanded or not. You can click on any of these to display a specific configuration page.



The above diagram shows all PCs and devices connected to your Palm Server Router and their status. Click on **Quick Setup** on the left screen of the main menu. Then you'll see the full functionality selection screen appears and do the setting for each item.

Note: The device model name of USB Device, Webcam and Printer will be shown under the picture of each device if the Product supports.

Quick Setup full function table list

Quick Setup Selection	
<input checked="" type="checkbox"/>	WAN Setup → Initiate as default setting.
<input checked="" type="checkbox"/>	LAN Setup → Initiate as default setting.
<input checked="" type="checkbox"/>	Wireless Setup
<input type="checkbox"/>	USB Disk Management Setup
<input type="checkbox"/>	User Account Management Setup
<input type="checkbox"/>	Firewall Setup
<input type="checkbox"/>	QoS Setup
<input type="checkbox"/>	FTP Server Setup
<input type="checkbox"/>	Printer Server Setup
<input type="checkbox"/>	Web Camera Setup
<input checked="" type="checkbox"/>	Time Server Setup → Initiate as default setting.
<input checked="" type="checkbox"/>	Password Setup → Initiate as default setting.
<div>Next Exit</div>	

Quick Setup instruction

- **LAN Setup:** Setup the IP Address for LAN and Group. If you are using the Router with multiple PCs on your LAN, you must connect the LAN via the Ethernet ports on the built-in Ethernet switch. You should also assign a unique IP address to each device residing on your LAN.
- **Wireless Setup:** Define the Wireless Mode, ESSID, TxRate, Channel and other wireless settings.
- **USB Disk Management Setup:** View the entire data folder inside each storage devices, also can do formatting and disk partition.
- **User Account Management Setup:** Set maximum user number, account and right for using personal services of your Palm Server Router for each user.
- **FTP Server Setup:** To enable FTP server and set controlling rules.
- **Print Server Setup:** To enable /disable server.
- **Web Camera Setup:** To enable Web camera function and set image format.
- **Time Server Setup:** Set time by NTP or manual.
- **Password Setup:** To change administrator's password.

There are 4 major items shall be set in configuring Quick Setup, and the others can be selected under your demanding, please click on "**Next**" button after confirmed.

LAN Setup

If you are using the Palm Server Router with multiple PCs on your LAN, you must connect the LAN via the Ethernet ports on the built-in Ethernet switch. You must assign a unique IP address to each device residing on your LAN. The LAN IP address identifies the router as a node on your network; that is, its IP address must be in the same subnet as the PCs on your LAN. The default LAN IP for the Internet Security Router is 192.168.1.254.

Quick Setup - LAN Setup			
Use this page to set up the local IP address and subnet mask for your router.			
LAN IP			
IP Address :	192 . 168 . 1 . 254	→ Gateway IP Address.	
IP Netmask :	255 . 255 . 255 . 0		
DHCP			
DHCP :	<input checked="" type="radio"/> Enable <input type="radio"/> Disable		
Start IP :	2		
End IP :	253		
Advanced :	<input type="checkbox"/>		
Router :	. . .		
DNS :	. . .		
WINS :	. . .		
		Back	Next
		Exit	

For Gateway IP Address, the IP address 192.168.1.xxx (xxx can be any number between 1 and 253 that is not used by another device.) Please don't change the default LAN IP settings at this section until after you have completed the rest of the configurations and confirm that your Internet connection is working. And the DHCP Server will automatically allocate an unused IP address from the IP address pool to the requesting computer; which means you must specify the starting and ending address of the IP address pool, and the DHCP Router's address must be identical to the LAN IP's IP Address.

Click on **Next** button to proceed to the next setting.

Wireless Setup

There are 2 ways of hardware connection via **Wireless** upper link and **Wire** upper link.

1. AP/Bridge Setting

Palm Server Router is based on industry standards to provide compatible high-speed wireless connectivity within your home, business or public access wireless networks. Strictly adhering to the IEEE standard, the router will allow you to access the data you want, when and where you want it. You will be able to enjoy the freedom that wireless networking delivers.

The image shows a 'Wireless Configuration' window with a green header. Below the header, the MAC Address is displayed as 00:14:85:d0:bc:03. The configuration fields include: Wireless (set to AP/Bridge), Wireless Mode (set to 802.11B/G), ESSID (set to default), TxRate (set to Auto), Channel (set to 6), Hide SSID (OFF), TxPreamble (Long), Beacon interval (100 msec), RTS Threshold (2346), Authentication Mode (OPEN), and Encrypt Type (NONE). There are 'Apply' and 'Cancel' buttons at the bottom. Two orange arrows point to the 'Wireless' and 'ESSID' dropdowns with explanatory text. A Windows-style notification bubble in the bottom right corner states 'Wireless Network Connection' and 'Connected to: Palm_Server_Router Signal Strength: Excellent'.

MAC Address : 00:14:85:d0:bc:03

Wireless : AP/Bridge → Select AP/Bridge from drop-down list.

Wireless Mode : 802.11B/G

ESSID : default → You can use the default ESSID unless more than one AP/Router is deployed in the same area. And it will show when searching the wireless signal.

TxRate : Auto

Channel : 6

Hide SSID : ☐ ON ☒ OFF

TxPreamble : ☒ Long ☐ Short

Beacon interval : 100 msec(20~999, default:100)

RTS Threshold : 2346 (256~2346, default:2346)

Authentication Mode : ☒ OPEN ☐ SHARED

Encrypt Type : NONE

Apply Cancel

Wireless Network Connection
Connected to: Palm_Server_Router
Signal Strength: Excellent

For selecting configuration utility in AP/Bridge wireless connection, the **Channel 6** is the default channel; all devices on the network must be set to the same channel to communication on the network. The default **TxPreamble** setting is Long (if you use high traffic networks should use the shorter preamble type). **Authentication** is the security function to prevent the connection requests from unauthorized wireless clients. As the **Encryption Type**, select WEP or WPA can protect your data from eavesdroppers, if you do not need the encryption, select "None" to skip the following setting.

After checking each above blank and choose the suitable item as your demand, click on "Next" button to proceed to next setting.

Notice: If use AP/Bridge to do wireless connection to router, here suggest disable the DHCP setup in LAN Setup, please refer to "4.2.1 LAN Setup" in page 99.

2. WDS Setting

The WDS setting for hardware connection via WIRELESS upper link is as below.

Wireless Configuration	
MAC Address : 00:14:85:d0:bc:61	
Wireless :	WDS → Select WDS from drop-down list.
Wireless Mode :	802.11B/G
ESSID :	default
TxRate :	Auto
Channel :	11 → 6 is the default channel. Both 2 APs must share the same channel. (The wireless adapters will automatically scan and match the wireless setting.)
Hide SSID :	<input type="radio"/> ON <input checked="" type="radio"/> OFF
TxPreamble :	<input checked="" type="radio"/> Long <input type="radio"/> Short
Beacon interval :	100 msec(20~999, default:100)
RTS Threshold :	2346 (256~2346, default:2346)
Authentication Mode :	<input type="radio"/> OPEN <input checked="" type="radio"/> SHARED
Encryption : WEP → Optional.	
WEP Encryption :	64 bits
Key Type :	HEX
<input checked="" type="radio"/> WEP Key 1 :	
<input type="radio"/> WEP Key 2 :	
<input type="radio"/> WEP Key 3 :	
<input type="radio"/> WEP Key 4 :	
WDS	
Enable / Disable	MAC
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
→ The MAC address should be associated with another wireless device setting.	
Back Next Exit	

Moreover, **WDS** (Wireless Distribution System) is a Wireless Access Point mode that enables wireless bridging in which WDS APs communicate with each other only (without allowing for wireless clients or stations to access them), and/or wireless repeating in which APs communicate both with each other and with wireless stations (at the expense of half the throughput), please input the MAC address into the WDS column.

USB Disk Management Setup

Easy to check all the USB storage devices connected to your Palm Server Router, view the entire data folder inside each storage devices, and you can manage the disk formatting / partition via click on the button of this page.

Quick Setup - USB Disk Management

You can specify which USB storage to be System Disk.

USB Device Name

SysDisk	Disk	TYPE	Capacity	Free Space	
<input checked="" type="radio"/>	USB A	FAT16	251 MB	208 MB	Unplug

OKDisk Explorer

Partition / Format SysDisk

All existing data and partitions on the HDD will be DESTROYED ! Make sure you really need to do this !

TYPE

☒ EXT3 ☐ FAT32

Format

BackNextExit

Select the USB Disk and click on “**OK**” button for refreshing all disks before you do disk partition, and the “**Unplug**” button will appear. To partition/format the disk, please select the disk and click on “**Format**” button. Moreover, if you want to view the data inside the disk, please go to “**4.2.5 FTP Sever Setup**” in page 116 to enable FTP server and then click on “**Disk Explorer**” to view all the disks folder inside the device.

Notice: You have to click on “**Unplug**” button before removing the USB devices from Palm Server Router.

User Account Management Setup

Personal users can use each individual application such as My Status, My Webcam and My Document. This section is to set the user's right. Also, all the users right will be showed in User Account List and can do the edit or delete by clicking the meaning text.

Quick Setup - User Account Management				
Max Login User : 10 ▼				
Create User Account				
User Name :	<input type="text"/>	}	Input the user's name and password, and then click on "Add", and you will see the user information appear on the "User Account List"	
Password :	<input type="password"/>			
Group Right :	<input type="checkbox"/> View Webcam Recorded Files			
User Right :	<input type="checkbox"/> Web Camera Monitor <input type="checkbox"/> FTP Server			
<div>Add Cancel</div>				
User Name	Password	Status	Right	Edit/Delete
trista	****	Active	FTP/Webcam/	Edit /Delete
<div>Back Next Exit</div>				

Set each user's right and space arrangement, then click on "**Add**" button for saving user's setting, and click on "**Next**" button after finished.

FTP Server Setup

The Palm Server Router can be the FTP Server provides users to transmit files, also for the guest can download the files from assign website. Moreover, by connecting USB HDD, USB Flash to the router, user can easily set up a FTP Server to share or download files for local or remote users.

Quick Setup - FTP Server	
Enable FTP Server :	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Enable Anonymous to Login :	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Enable FTP Access from WAN :	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
<div>Back Next Exit</div>	

If the USB device isn't enabled first, you can't enable FTP Server. (Not even click on "Enable")

Set the FTP Server and related setting. Disable the function as demand, and click on **Next** button to continue.

Printer Server Setup

Palm Server Router, an Internet access solution for your LAN, which provides you the shared web surfing, and support USB interface printer, any users in the same subnet of the Palm Server Router can print their document via the network printers.

Printer Server Configuration	
Enable Printer Server:	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Enable Printer Access From WAN:	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Printer Model:	HP Photosmart 2600 series
Printer Name:	1180
Printer Description:	123
<div>Apply Cancel</div>	

If the printer isn't connected, you can't choose "Enable".

Enable the printer and click on **Next** button to go to next setup.

Notice: Before printer server enable, please make sure the printer had connected to the product, otherwise, the "Enable" selection can't be checked.

Notice: After printer server setup finished, please install the driver of your printer device.

Web Camera Server Setup

If you plan to use the Palm Server Router as a Web Camera site, connect a supported USB Web Camera to the USB port of the Palm Server Router. To enable the webcam server and access from WAN as demand, and the Image format can be selected.

Quick Setup - Web Camera Server

Enable webcam server : ☒ Enable ☐ Disable

Access from WAN : ☐ Enable ☒ Disable

Image format : CIF

Make sure the webcam already connected to Palm Server Router, and then select "Enable" under your demand and situation; moreover, you have to make sure the "image format" which you want to see on the screen.

Back Next Exit

Click on **Next** button to connect to next step.

Notice: Before webcam server enable, please make sure the webcam had connected to the Product, otherwise, the "Enable" selection can't be checked.

Time Server Setup

The section provides time alteration. The Router keeps a record of the current date and time, which is used to calculate and report various performance data, but changing the router's date and time does not affect the date and time on your PCs.

Quick Setup - Time Server

Please set your time and time zone in this page.

Local Time : 2007/05/01 Thu 08:16:12

☒ Setup Time Use NTP

Default NTP Server : clock.stdtime.gov.tw (optional)

Time Zone : (GMT+08:00) Beijing, Hong Kong, Singapore, Taipei

Daylight saving time : Disable

☐ User Setup

Set the Time : Year : 2004 Month : Jan Day : 01
Hour : 00 Minute : 00 Second : 00

Back Next Exit

Select your time zone from the "Time Zone" drop-down list, or you may set the time by manual; there is no real time clock inside the router, the system date and time are maintained by external network time server.

Password Setup

Here suggests changing the password for logging into the configuration manager in terms of security reason.

Quick Setup - Change Password

The router ships with no password. You may set a password or change your current password in this page.

Login : admin

Old Password :

New Password :

New Password (Confirm) :

The password may consist of A-Z, a-z, 0-9, underscores, and a single dot (.)

Back Next Exit

For changing password, please fill the password information into above blanks, and then click on **Next** button.

Notice 1: Only the password can be changed, the user name for administrator is **admin** and can't be changed anymore.

Notice 2: If you forget administrator's password, please reset the Palm Server Router to factory default setting by pushing the "Reset" button on the rear panel for 5 seconds. And the password will return to **admin**.

Quick Setup Finish

The Quick Setup has been completed successfully when you see this screen.

Quick Setup Finish

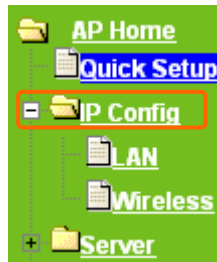
To press finish button, system will be reboot.

Back Finish

To apply your new settings, please click on **Finish** button to reboot system automatically and go to the product's diagram homepage. You may connect to Internet via wired or wireless at this moment according to above settings.

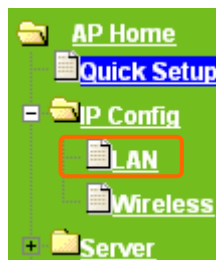
IP Configuration

This function allows you to add routing rules into Palm Server Router. It is useful if you connect several computers behind Palm Server Router to share the same connection to Internet.



LAN

Use this page to set up the local IP address and subnet mask for your router. Please select **LAN** under the **IP Config** menu and follow the instructions below to enter the LAN setting page to configure the settings you want.



1. IP Address

The default value of LAN IP address is **192.168.1.254** for this router.

2. IP Netmask

Input Subnet Mask, normally it is **255.255.255.0**.

3. DHCP

Enable or disable DHCP services. The DHCP server will automatically allocate an unused IP address from the IP address pool to the requesting computer if enabled.

4. Start IP

This field specifies the first address in the pool to be assigned by the DHCP server in your local network. The default setting is 2.

5. End IP

This field specifies the last address in the pool to be assigned by the DHCP server in your local network. The default setting is 253.

6. Advanced

Enable the advance setting and then setup the Router, DNS and WINS value.

7. Router

This field indicates the IP address of DNS to provide to clients that request IP Address from DHCP Server, the default setting is the same with LAN IP address.

8. DNS

This field indicates the IP address of DNS to provide to clients that request IP Address from DHCP Server, the default setting is the same with LAN IP address.

9. WINS

The Windows Internet Naming Service manages interaction of each PC with the Internet. If you use a WINS server, enter IP Address of server here.

10. Apply & Cancel

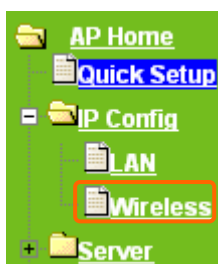
Click on **Apply** button to continue. Click on **Cancel** button to clear the settings on this page.

Besides, the DHCP information will be listed below above setting in DHCP Clients, including IP Address and MAC address.

LAN Configuration	
Use this page to set up the local IP address and subnet mask for your router.	
LAN IP	
IP Address :	192 . 168 . 1 . 254
IP Netmask :	255 . 255 . 255 . 0
DHCP	
DHCP :	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Start IP :	2
End IP :	253
Advanced :	<input type="checkbox"/>
Router :	192 . 168 . 1 . 254
DNS :	192 . 168 . 1 . 254
WINS :	
<input type="button" value="Apply"/> <input type="button" value="Cancel"/>	
DHCP Clients List	
IP	MAC
192.168. 1. 2	00:0e:35:0d:a0:86
192.168. 1.119	00:11:2f:00:08:15

Wireless

The Palm Server Router enables fastest 54 Mbps IEEE802.11g wireless transmissions and keeps compatibility with existing IEEE 802.11b devices. The Palm Server Router complies with IEEE 802.11b standard. Please select **Wireless** under the main menu. Follow the instructions to enter the **Wireless** settings to configure the settings you want.



1. Wireless

Select **AP/Bridge** or **WDS** to allow or disallow Wireless operating.

2. Wireless Mode

This field indicates the 802.11g interface mode. “802.11G” prevents the 802.11b clients from accessing the router. “802.11B/G” allows both 802.11b and 802.11g clients to access the router. “802.11B” will enable the network as an 802.11b wireless network. By default, the Mode is “**802.11B/G**”.

3. ESSID

You can use the default ESSID and radio channel unless more than one Palm Server Router or access points are deployed in the same area. Under this situation, it is advised that you should use a different ESSID and radio channel for each of Palm Server Router or access point in order to distinguish from each other. All of the Palm Server Routers and your wireless LAN card must have the same ESSID to allow a wireless mobile client roaming between Palm Server Routers. By default, the ESSID is set to “**Palm_Server_Router**”.

4. TX Rate

Select the transmission rate for the network. The default setting is **Autoing**

5. Channel

IEEE 802.11g and 802.11b devices are direct sequence spread spectrum devices that spread a radio signal over a range of frequencies. The range of frequencies used by a direct sequence device is called Channel.

The 802.11g and 802.11b specification supports up to 14 overlapping Channels for radio communication. But only 11 Channels are supported in the United States and therefore built-in on Palm Server Router. To minimize interference, configure each Palm Server Router to use Non-overlapping channels. Non-overlapping channels have 25 MHz

separation beginning at the first allowed channel for the country (for the US and most of Europe, channel 1, 6 & 11 are used.)

Make sure that Palm Server Router sharing the same Channel (or Channels close in number) is as far away from each other as possible, based on the results of your site survey of the facility. You can find the site survey utility in the Palm Server Router's setup CD. By default, the channel is "6".

6. **Hide SSID**

This term is used to increase the security level. Check it to hide SSID information against the wireless clients that are sniffing radio. By default, this option is inactive.

7. **TxPreamble**

The default **TxPreamble** setting is Long (if you use high traffic networks should use the shorter preamble type)

8. **Beacon Interval**

Beacons are packets sent by an access point to synchronize a wireless network. Specify a beacon interval value. Default (100) is recommended.

9. **RTS Threshold**

This value should remain at its default setting of 2346. If you encounter inconsistent data flow, only minor modifications to the value range between 256 and 2346 are recommended

10. **Authentication Mode**

Four authentication methods are supported: Open and Shared. Select **Open**, your wireless network would be intruded by anonymous. Not only your network bandwidth would be shared; but also transmitting data might be intercepted. Select **Shared** function and it can be taken effect.

11. **Encrypt Type - WEP**

There are two types of encrypt type can be selected, including WEP and WPA.

WEP Encryption: Enabling WEP can protect your data from eavesdroppers. If you do not need this feature, select "None" to skip the following setting. The Palm Server Router supports both 64-bit and 128-bit encryption using the Wired Equivalent Privacy (WEP) algorithm. Select the type of encryption you want to use (64 or 128 bit) and configure one to four WEP Keys. The "1280bit" method is more secure than the "64-bit".

Key Type: For 64bits WEP key, either 5 ASCII characters or 10 hexadecimal digitals leading by **0x** can be entered. For 128bits WEP key, either 13 ASCII characters or 26 hexadecimal digits leading by **0x** can be entered.

Note: 128 bits WEP is most secure, but has more encryption/decryption overhead. Note that all wireless devices must support the same WEP encryption bit size and have the same key. Four keys can be entered here, but only one key can be selected at a time. The keys can be entered in ASCII or Hexadecimal. Select the item from drop-down list you wish to use.

Pass phrase: Automatically generate four WEP keys. A WEP key is either 10 or 26

hexadecimal digits (0~9, a~f, and A~F) based on whether you select 64 bit or 128 bit in the WEP drop-down menu. Type a combination of up to 64 letters, numbers, or symbols in the blank, the Palm Server Router uses an algorithm to generate four WEP keys for encryption. If you want to type in the keys manually, leave this filed blank.

Note: This function eases users from having to remember their passwords. But this isn't as secure as manual assignment.

WEP Key: At most four keys can be set. A WEP key is either 10 or 26 hexadecimal digits (0~9, a~f, and A~F) based on whether you select 64 bit or 128 bit in the WEP drop-down list. The Palm Server Router must have at least the same default key.

Encryption : WEP	
WEP Encryption :	128 bits ▼
Key Type :	HEX ▼
<input checked="" type="radio"/> WEP Key 1 :	<input type="text"/>
<input type="radio"/> WEP Key 2 :	<input type="text"/>
<input type="radio"/> WEP Key 3 :	<input type="text"/>
<input type="radio"/> WEP Key 4 :	<input type="text"/>
<input type="button" value="Apply"/> <input type="button" value="Cancel"/>	

12. Encrypt Type - WPA

The WPA encrypts each frame transmitted from the radio using the pre-shared key (PSK) which entered from this panel or a key got dynamically through 802.1x.

WPA-PSK (TKSP): Allow the access from WPA clients simultaneously and the encryption keys are given from PSK respectively.

WPA Rekey Timer: Allows for the session keys to be refreshed over time, minimizing the amount of data that is encrypted with the same session key.

ASCII: The 8~63 ASCII characters can be entered, for example, "0123456789ABCD...."

Encryption : WPA	
WPA Encryption :	<input checked="" type="radio"/> WPA-PSK (TKIP) <input type="radio"/> Radius with 802.1x
WPA Rekey Timer :	<input type="text" value="60"/> sec(default:60, 0 to disable rekey)
WPA-PSK (Pre-Shared Key)	
ASCII :	<input type="text"/>
	(8~63 ASCII)
<input type="button" value="Apply"/> <input type="button" value="Cancel"/>	

Radius with 802.x: Check this circle to enable Radius client function.

WPA Rekey Timer: Allows for the session keys to be refreshed over time, minimizing the amount of data that is encrypted with the same session key.

RADIUS Server IP: The IP address of RADIUS server.

RADIUS Server Port: The UDP port number that the RADIUS server is listening. The default value is 1812.

Shared Secret: The RADIUS server and client share a secret that is used to authenticate the messages sent between them. You must configure both sides to use the same shared secret.

Encryption : WPA	
WPA Encryption :	<input type="radio"/> WPA-PSK (TKIP) <input checked="" type="radio"/> Radius with 802.1x
WPA Rekey Timer :	<input type="text" value="60"/> sec(default:60, 0 to disable rekey)
Radius with 802.1x	
RADIUS Server IP :	<input type="text"/> . <input type="text"/> . <input type="text"/> . <input type="text"/>
RADIUS Server Port :	<input type="text"/> (0~65535, default:1812)
Shared Secret :	<input type="text"/> (longer than 8 ASCII characters)
<input type="button" value="Apply"/> <input type="button" value="Cancel"/>	

13. Apply & Cancel

Click on **Apply** button to save the settings. If you want to clear the settings, please click on **Cancel** button. The functional button, **Cancel** can take effect after clicking on **Apply** button.

Wireless Configuration	
MAC Address : 00:14:85:d0:bc:61	
Wireless :	WDS
Wireless Mode :	802.11B/G
ESSID :	default
TxRate :	Auto
Channel :	11
Hide SSID :	<input type="radio"/> ON <input checked="" type="radio"/> OFF
TxPreamble :	<input checked="" type="radio"/> Long <input type="radio"/> Short
Beacon interval :	100 msec(20~999, default:100)
RTS Threshold :	2346 (256~2346, default:2346)
Authentication Mode :	<input type="radio"/> OPEN <input checked="" type="radio"/> SHARED

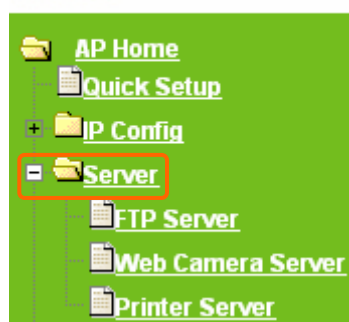
Encryption : WEP	
WEP Encryption :	128 bits
Key Type :	HEX
<input checked="" type="radio"/> WEP Key 1 :	
<input type="radio"/> WEP Key 2 :	
<input type="radio"/> WEP Key 3 :	
<input type="radio"/> WEP Key 4 :	

WDS	
Enable / Disable	MAC
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	

Server

The Palm Server Router provides FTP Server, Web Camera Server and Printer Server application.

MENU ...



4.4.1 FTP Server

By directly connecting USB storage devices to any USB port, FTP server can be created with simple configuration. FTP Server utility allows both local and remote users to upload or download files, pictures or MP3 music from the same storage device in most easy and timely fashion. It is also cost effective where users do not need to purchase a dedicated PC to set up a 24 hours FTP service.

Before configure FTP Server, please make sure the storage device is properly plug into any USB port on the router and make sure this USB storage device is detected by the router.

MENU ...



1. **Enable FTP Server:** The Enable for FTP Server only can be selected when USB storage device plugged.
2. **Enable Anonymous to Login:** Allow anonymous to log in after check on enable.
3. **Enable FTP Access from WAN:** Allow FTP access from WAN side by checking on enable for this item.
4. **FTP Server Port:** Define the FTP command transfer service port. If you want to change this port number, remember to change the service port setting of your FTP client as well.
5. **Idle connection Time-Out:** When a specific time value is added, FTP Server will be de-activated if it has no activity within the time limit.
6. **Apply & Cancel**
Click on **Apply** button to continue. Click on **Cancel** button to clear the settings on this page.

Notice: FTP server is compatible with FAT32 or EXT2 format USB storage device. In case you need to format your USB storage device. Please always make sure the device is formatted with FAT32 or EXT2 standard.

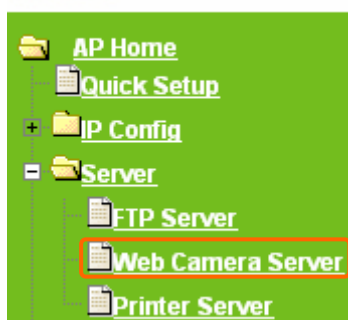
FTP Server	
Enable FTP Server :	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Enable Anonymous to Login :	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Enable FTP Access from WAN :	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
FTP Server Port :	<input type="text" value="21"/>
Idle Connection Time-Out :	<input type="text" value="300"/> Seconds(MIN: 60 default: 300)
<input type="button" value="Cancel"/>	

User Account List		
User Name	Status	Opened Directory / File
jacky	Offline	
Trista	Offline	

4.4.2 Web Camera Server

The Palm Server Router has built-in Web Cam Server. By connecting web camera to the router, it allows user to monitor their home or office from remote locations. Motion Detection function also been built-in and allows user to use webcam to detect any motion at their home or office and send email alert with captured images.

MENU ...



4.4.2.1 Web Camera Server Basic Setting

1. **Enable Webcam Server:** Allow using this function by checking on enable.
2. **Access from WAN:** Allow webcam can access from WAN side by checking on Enable for this item.
3. **Image format:** There are CIF & QCIF format can be selected for webcam's resolutions, CIF format is 352X228 pixels, and QCIF format is 176X144 pixels.

4. **Preview:** Click on this button, you can preview the image from webcam.
5. **Record Setting:** Please see the detail advance setting in “3.5.2.2 Web Camera Server Advanced Configuration”.
6. **Apply & Cancel**

Click on **Apply** button to continue. Click on **Cancel** button to clean the setting on this page.

Web Camera Server	
Enable webcam server :	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Access from WAN :	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Image format :	CIF <input type="button" value="Preview"/>
<input type="button" value="Record Setting"/>	
<input type="button" value="Apply"/> <input type="button" value="Cancel"/>	

4.4.2.2 Web Camera Server Advanced Configuration

Click on “Record Setting” button, and the screen will appear as below.

1. **Enable save image:** If you want to save the image from webcam, please check on Enable.
 2. **Save image interval:** For saving image, you can set the save interval time, the default value is 5 seconds.
 3. **Save Location:** Set the save location for webcam image, you may save into USB HDD or Remote FTP; if select save to remote FTP, please continue following remote FTP setting.
 4. **USB HDD Directory:** The section provides option of which folder should be used for saving webcam image.
 5. **Remote FTP URL:** Input the FTP URL for saving webcam image.
 6. **Remote FTP port:** Input the FTP port number under URL to save image.
 7. **Remote FTP user:** Enter the user’s name you like and it will be used to save the webcam image into the FTP server.
 8. **Remote FTP Directory:** To provide option of which folder should be used for saving webcam image.
 9. **Back:** Click on **Back** button for returning to Webcam Basic Setting screen.
 10. **Apply & Cancel**
- Click on **Apply** button to continue. Click on **Cancel** button to clean the setting on this page.

Webcam Advanced Configuration	
Snapshot Record Settings	
Enable save image :	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Save image interval :	<input type="text" value="5"/> sec (default: 5)
Save Location :	<input checked="" type="radio"/> USB HDD <input type="radio"/> Remote FTP
USB HDD Directory :	<input type="text" value="/tmp/webcam_recorded_files/"/>
Remote FTP URL :	<input type="text"/>
Remote FTP port :	<input type="text"/>
Remote FTP user :	<input type="text"/>
Remote FTP password :	<input type="text"/>
Remote FTP Directory :	<input type="text"/>
<input type="button" value="Back"/>	
<input type="button" value="Apply"/> <input type="button" value="Cancel"/>	

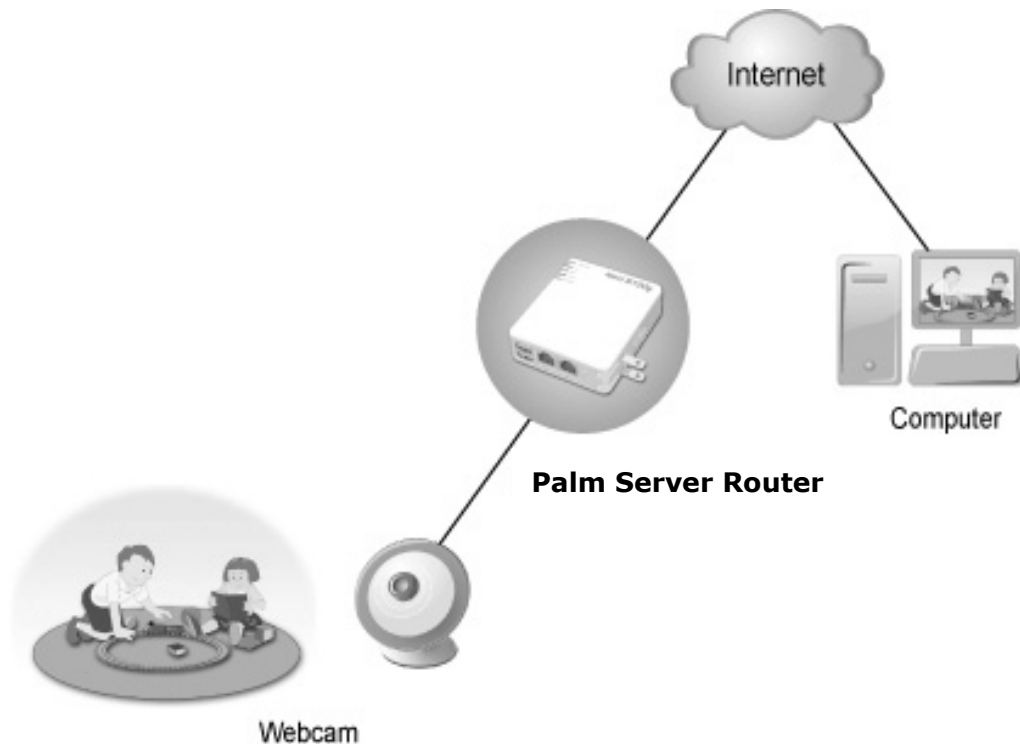
4.4.2.3 Application for Web Camera

* Web Camera monitoring application

Monitor your home with a Webcam via Palm Server Router. Take pictures or video via Palm Server Router, also can do the monitoring or recording all images into the USB HDD for reviewing. It works as surveillance tools for home or office security, network Webcams are now adopted for more personal matters, such as watching kids and monitoring pets. The Webcam can be remotely accessed and controlled via a browser. Besides, to record and monitor live action with USB webcam, also can view the image through Internet browsers or WiFi mobile phones.

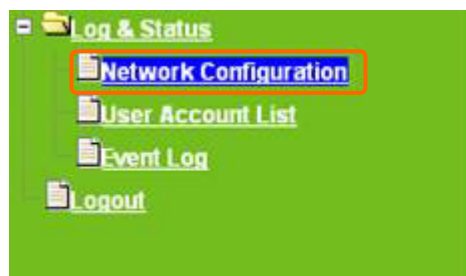
4.4.2.3.1 Web Camera Monitoring via WAN connecting

For viewing the image via webcam from WAN connecting, below is the diagram.



- **How to check your WAN IP address**

To monitor the image via webcam from distance, you need to know the WAN IP address. Select “**Network Configuration**” under **Log & Status** in main **Menu** after connection, and you will see the WAN IP Address which used to connect to webcam screen. Here use 210.64.134.25 as an example.



WAN	
MAC Address:	00:d0:68:01:bd:0e
Mode:	Dynamic IP
Status:	CONNECTION !
P Address:	192.168.1.110

- **Monitor the image via webcam from WAN**

Input the WAN IP Address (as you see in above screen) into browser blanks, and you will see the personal account login screen appear then input your own user account and password.

After login by personal, your will see the personal control panel screen as below, please click on **“My Webcam”**.

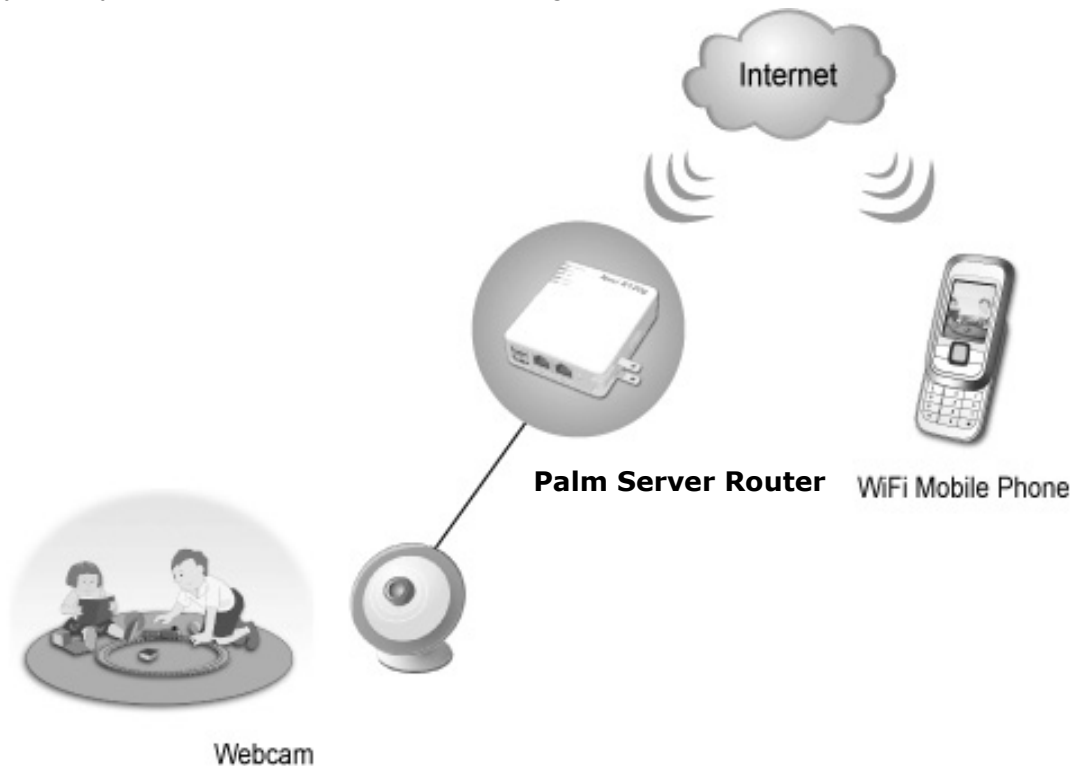


There will pop-up screen shows the image from web camera as example below.

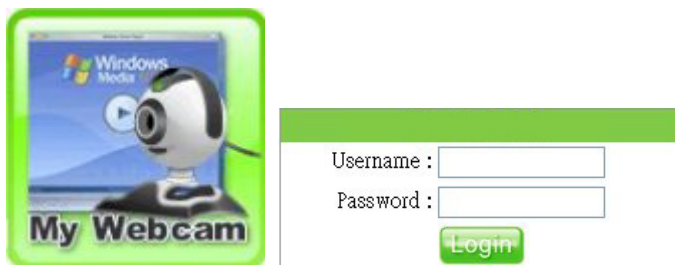


4.4.2.3.1.1 Web Camera Monitoring via WiFi mobile phone

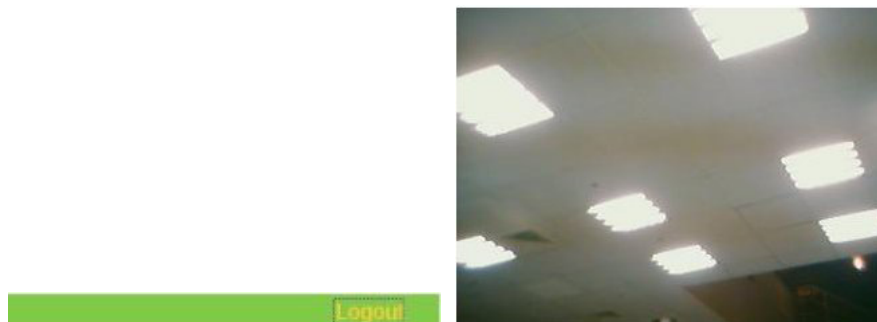
Also, you may view the monitor live action through WiFi mobile phones.



Please fill the WAN IP address plus “/webcam.html” (ex: <http://210.64.134.25/webcam.html>) into the mobile phone's browser blank and you will see the webcam user login screen appear.



After login by your own account, you will see the monitor image from web camera via WiFi mobile phone.



4.4.2.3.2 Web Camera Recording

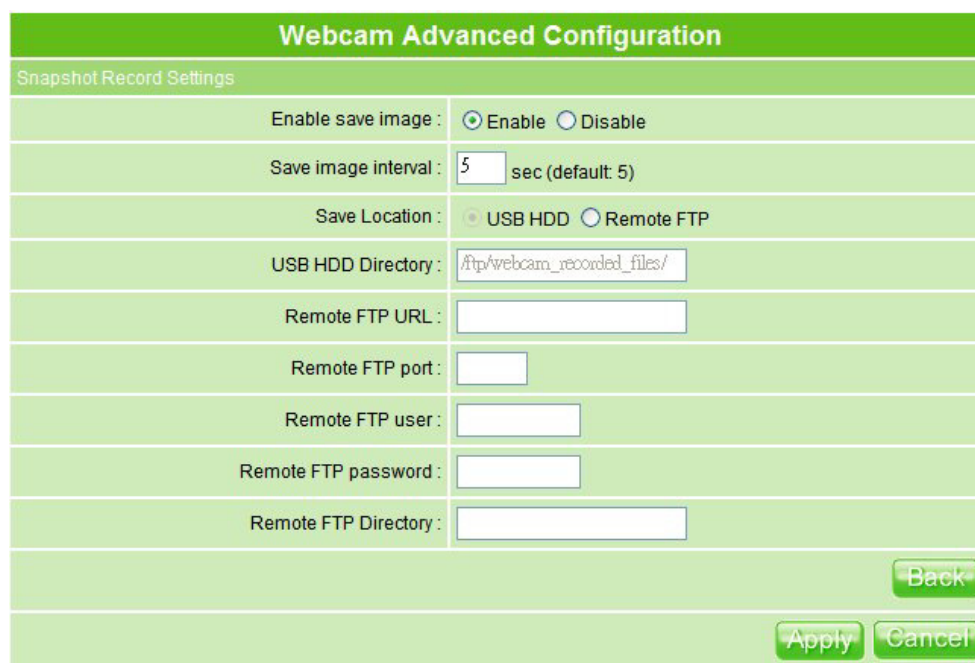
* Administrator setting

Palm Server Router also can record the pictures from Webcam; only **Administrator** can activate the settings. Select **Web Camera Server** from main **Menu** and enable this function, click on **Record Setting** button for further setting.



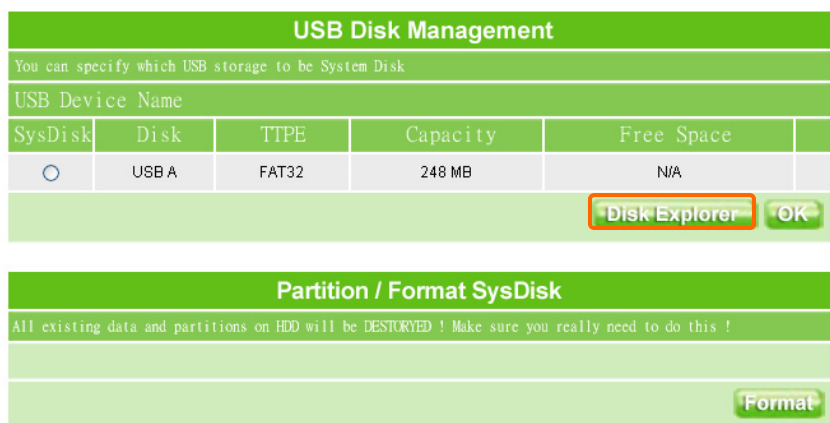
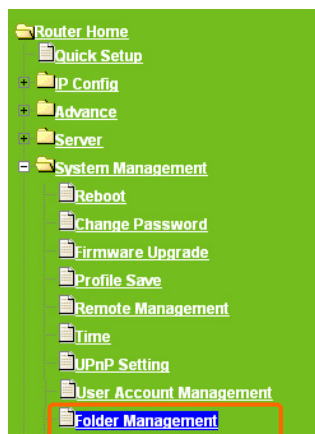
Web Camera Server	
Enable webcam server:	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Access from WAN:	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Image format:	CIF Preview
Record Setting	
Apply Cancel	

To set up the Webcam Advanced Configuration for each text box, the image from webcam will be recorded into your USB HDD or Remote FTP, please refer to User Manual for the detail setting. Click on **Apply** after setup finished.

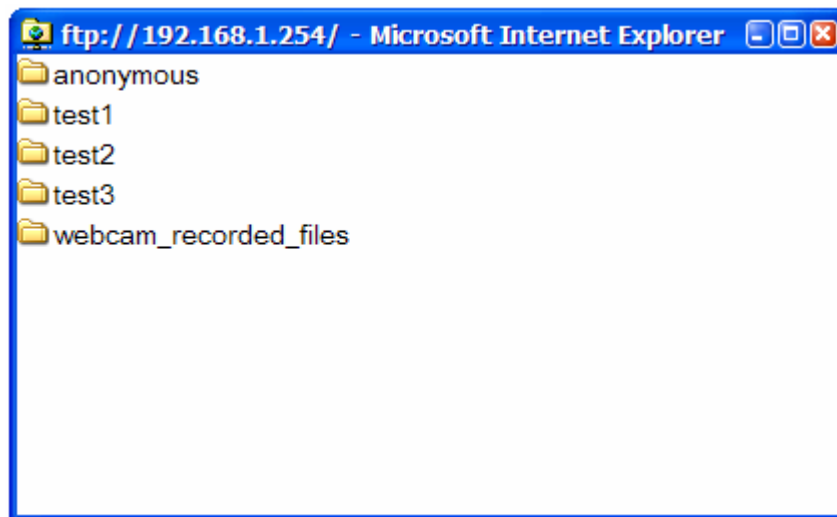


Webcam Advanced Configuration	
Snapshot Record Settings	
Enable save image :	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Save image interval :	5 sec (default: 5)
Save Location :	<input checked="" type="radio"/> USB HDD <input type="radio"/> Remote FTP
USB HDD Directory :	/ftp/webcam_recorded_files/
Remote FTP URL :	
Remote FTP port :	
Remote FTP user :	
Remote FTP password :	
Remote FTP Directory :	
Back	
Apply Cancel	

For administrator, you may view all the images from webcam recording, please select Folder Management and click on **Disk Explorer** to view entire folder inside the disk including webcam record files.



After click on **Disk Explorer**, you will see the folder screen appear including all the folders inside the Palm Server Router. (Below is the example.)



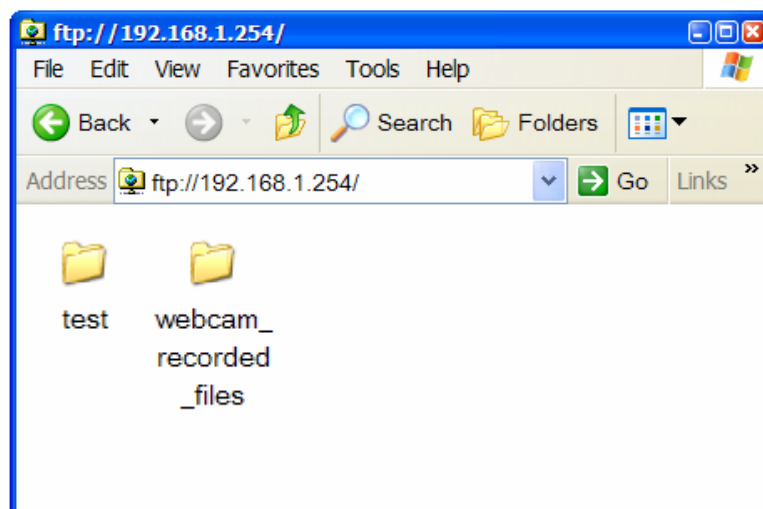
For getting the images from web camera or any files inside router, you may copy the files into your own HDDs directly.

4.4.2.3.2.1 Personal Application

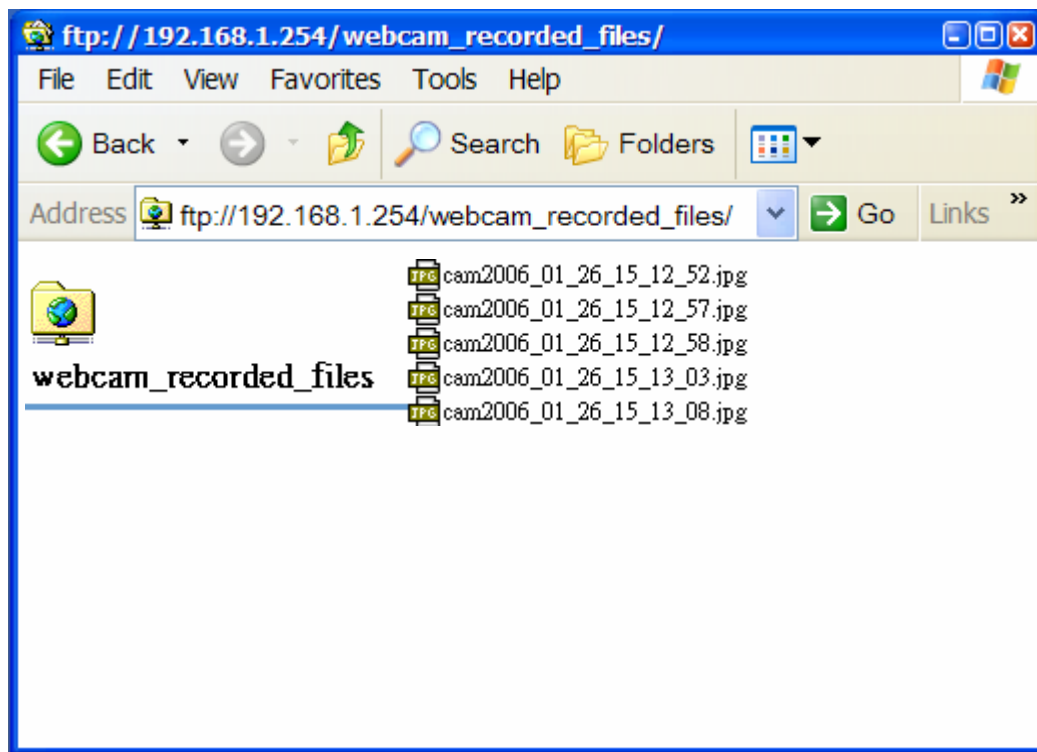
All the users under administrator's setting can view entire webcam recording images from My Document. Please refer to **"1.3.1 Personal Setup Configuration"** from page 24 to login by your own personal account. For viewing your own folder, please click on **"My Document"**.



After click on **"My Document"**, you will see below folder screen appear.



All the image files will be saved into the folder of "webcam_recorded_files", please click into the folder for checking.

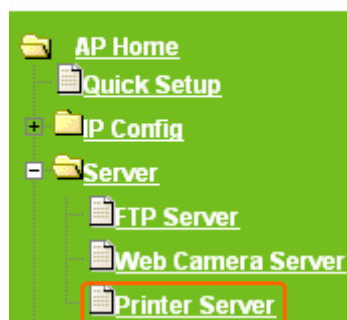


Notice: If you can't open the folder inside the FTP server, please check with administrator to set up your FTP & Webcam's access rights.

4.4.3 Printer Server

The Palm Server Router has 2 USB ports for connecting with printers to be shared on the local area network. Follow the steps to set up your PC to connect to a printer server.

MENU ...



1. **Enable Printer Server:** Check enable for applying printer server.
2. **Enable Printer Access From WAN:** Allow printer can access from WAN side by checking on enable for this item.
3. **Printer Model:** The printer model will be shown when plug the USB printer.

4. **Printer Name:** Enter the name of printer you like.
5. **Printer Description:** Enter the description of printer as your demand.
6. **Apply & Cancel**

Click on **Apply** button to continue. Click on **Cancel** button to clear the settings on this page.

Printer Server Configuration	
Enable Printer Server:	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Enable Printer Access From WAN:	<input type="radio"/> Enable <input checked="" type="radio"/> Disable
Printer Model:	HP Photosmart 2600 series
Printer Name:	1180
Printer Description:	123
<input type="button" value="Apply"/> <input type="button" value="Cancel"/>	

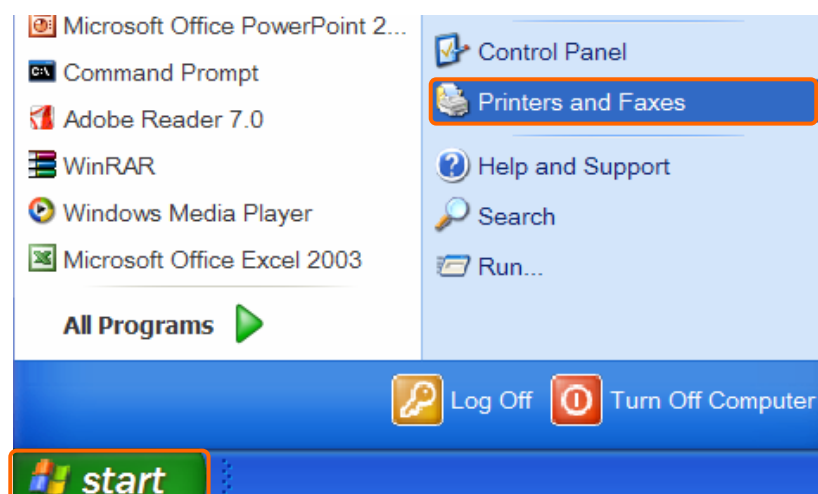
Besides above setting finished, the printer setting on PC is also need to be set as follows.

4.4.3.1 Printer Setting on PC

After Enable Printer Server in Quick Setup and Printer Server Configuration, please follow the steps to set the detail **LPR** settings in your PC. (Below example is for Windows XP platform.)

Step 1:

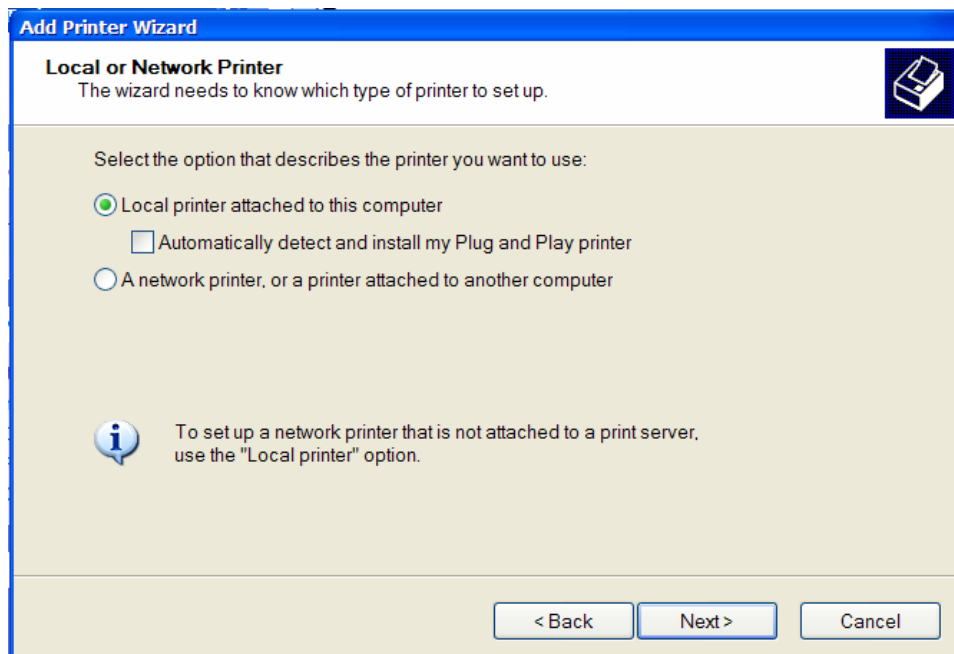
After setting USB printer in Palm Server Router's setting screen, please go to **Start > Printers and Faxes** to add a printer.



Then, please pay attention to the next steps. It points out only the important settings.

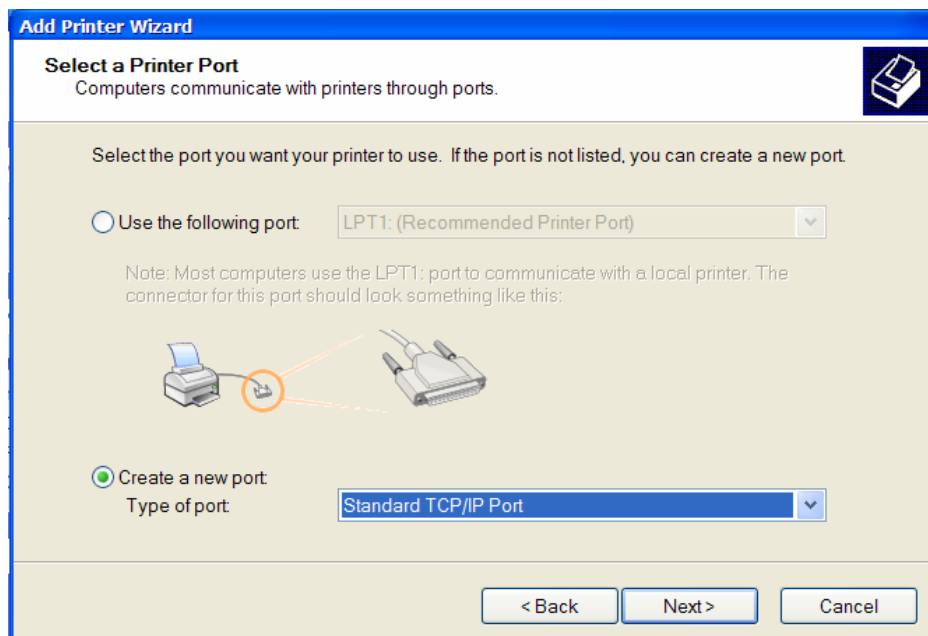
Step 2:

Select **Local printer attached to this computer**, and then click on **Next** button.



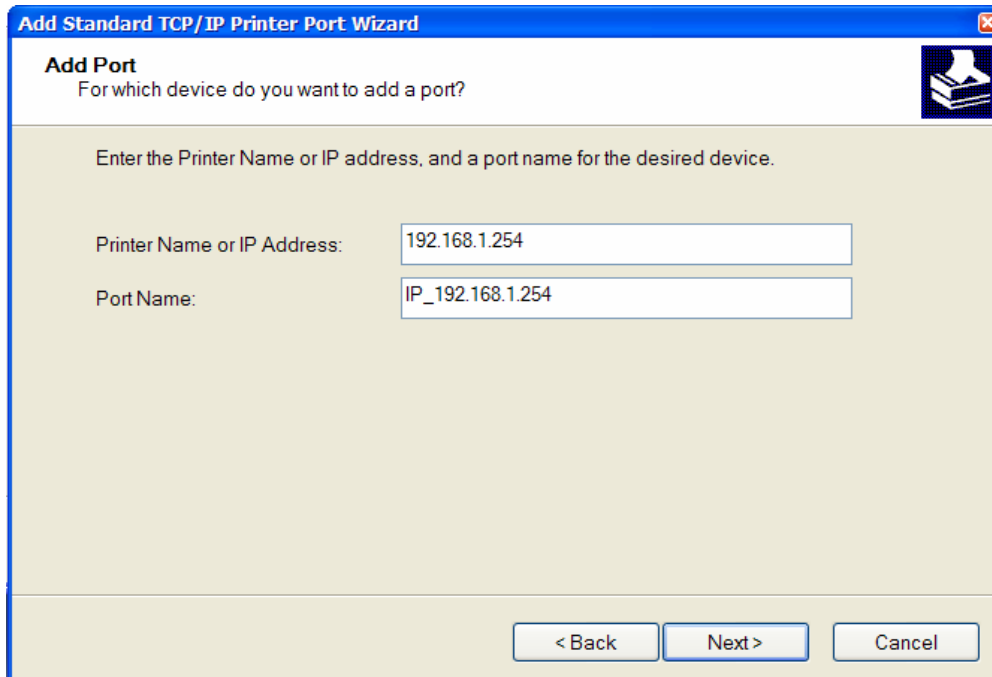
Step 3:

Select **Create a new port** and choose **Standard TCP/IP Port** from drop-down list, and then click on **Next** button.



Step 4:

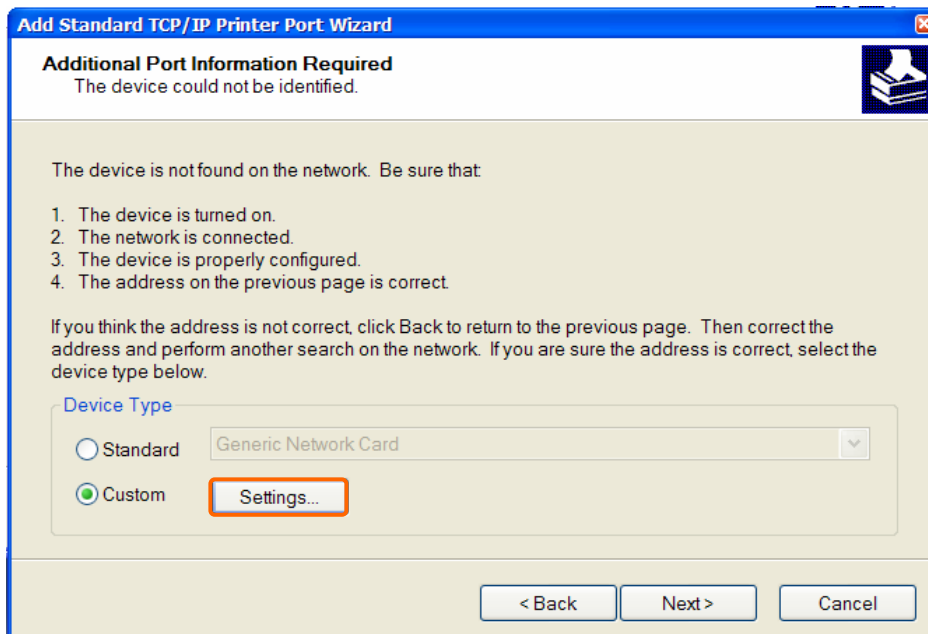
Input your Palm Server Router's address: **192.168.1.254** and click on **Next** button.



The screenshot shows the 'Add Standard TCP/IP Printer Port Wizard' window. The title bar reads 'Add Standard TCP/IP Printer Port Wizard'. The main heading is 'Add Port' with the subtext 'For which device do you want to add a port?'. Below this, it says 'Enter the Printer Name or IP address, and a port name for the desired device.' There are two input fields: 'Printer Name or IP Address:' with the value '192.168.1.254' and 'Port Name:' with the value 'IP_192.168.1.254'. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'.

Step 5:

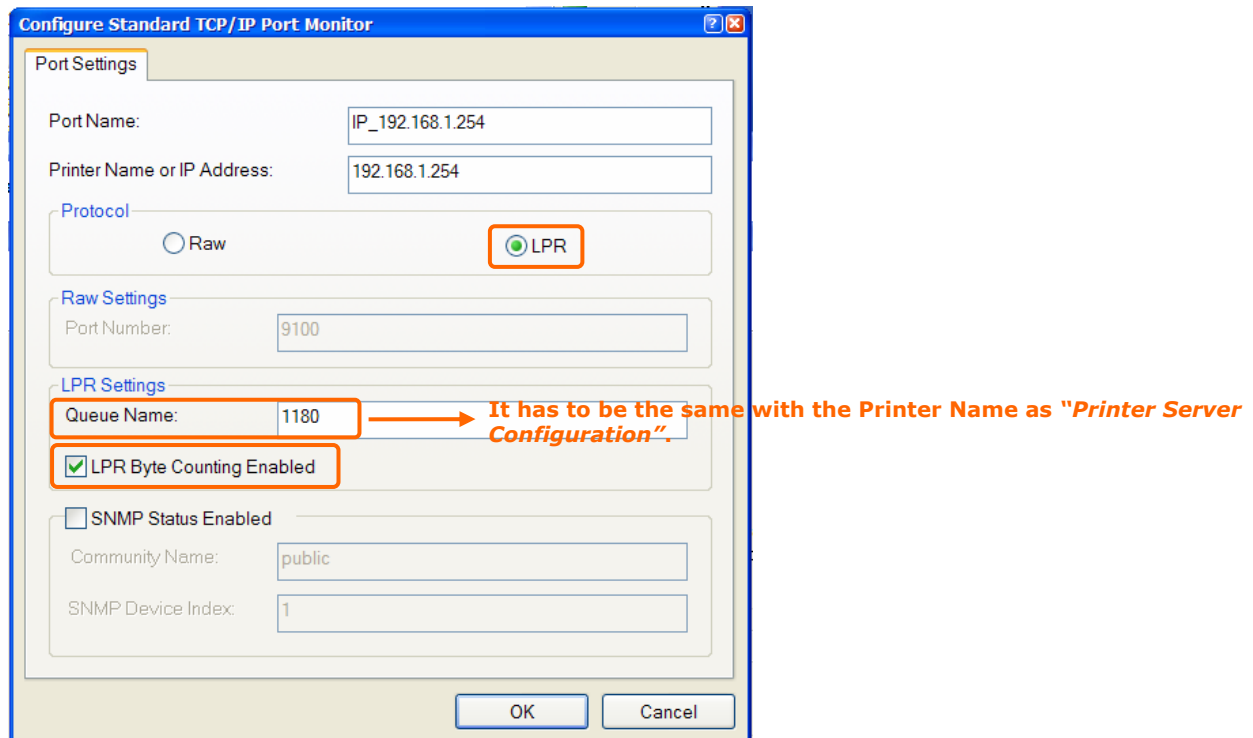
Select **Custom** and click on **Settings...** button to set the detail setting.



The screenshot shows the 'Add Standard TCP/IP Printer Port Wizard' window. The title bar reads 'Add Standard TCP/IP Printer Port Wizard'. The main heading is 'Additional Port Information Required' with the subtext 'The device could not be identified.' Below this, it says 'The device is not found on the network. Be sure that' followed by a list of four items: 1. The device is turned on. 2. The network is connected. 3. The device is properly configured. 4. The address on the previous page is correct. Below the list, it says 'If you think the address is not correct, click Back to return to the previous page. Then correct the address and perform another search on the network. If you are sure the address is correct, select the device type below.' There are two radio buttons: 'Standard' and 'Custom'. The 'Custom' radio button is selected. Below the 'Custom' radio button is a button labeled 'Settings...'. At the bottom, there are three buttons: '< Back', 'Next >', and 'Cancel'.

Step 6:

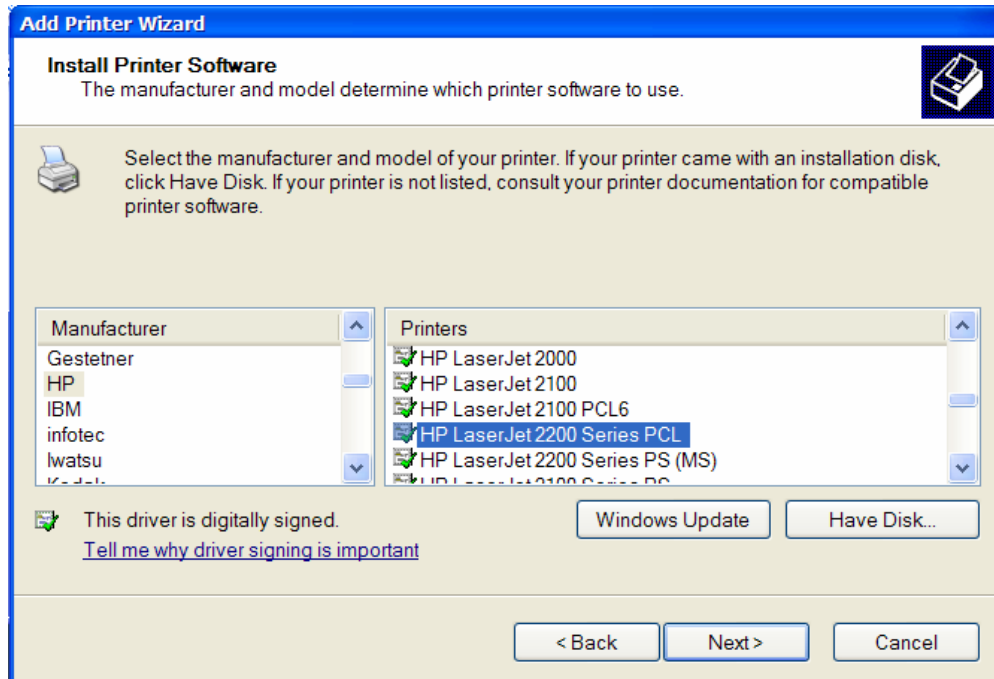
Select **LPR** and give it the same **Queue Name** as USB Printer Name as shown on step 1 in page 51, and mark **LPR Byte Counting Enabled**. Finally, click on **Next** button.



Before click on **Finish** button on the next screen after the aforesaid settings, you have to set the printer's driver as well.

Step 7:

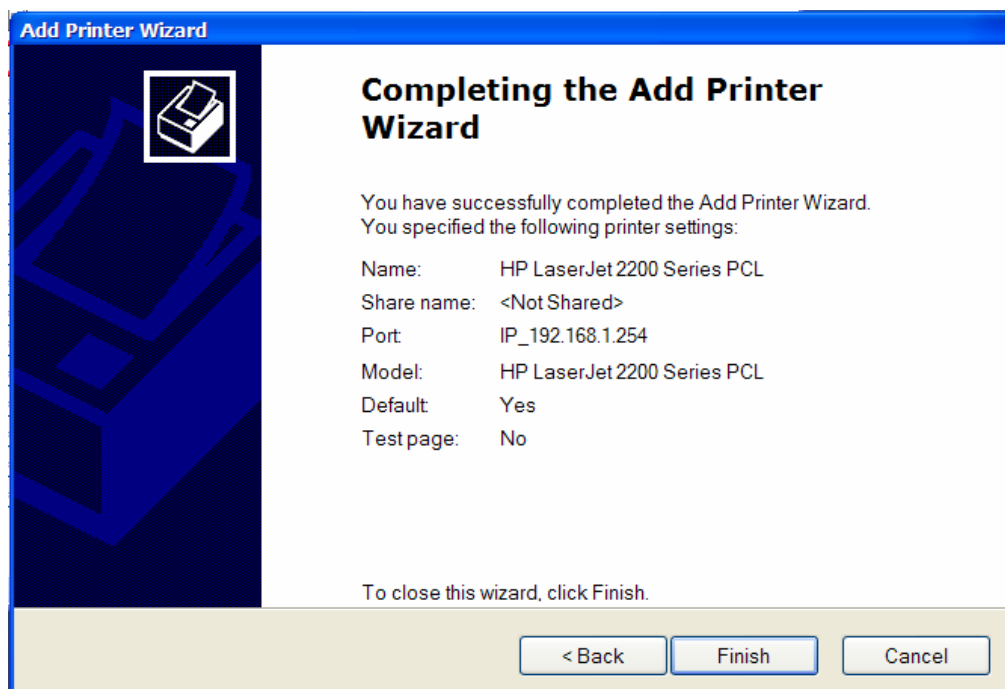
Select the **Manufacturer** and **Printers**. If your printer isn't listed in the table, please install its driver CD and then click on **Have Disk...** button for installation. Or click on **Next** button to finish the setting.



You can name your printer, set it as default printer and share your printer as the next screen shown, the **Printer Server** setting is getting finally.

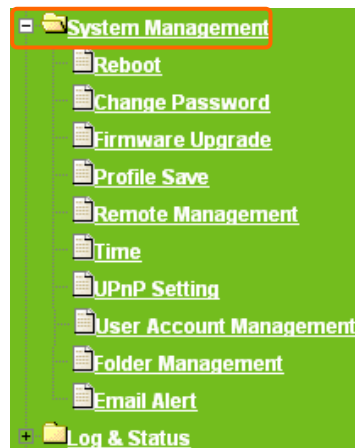
Step 8:

Click on **Finish** button and all steps of setting printer server are completely.



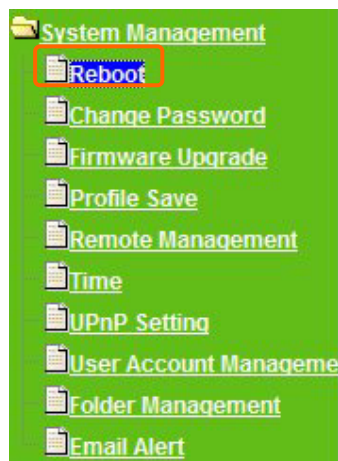
4.5 System Management

The Palm Server Router provides system management including password changing, firmware upgrade, time setting, user's account setting and other detail settings. Following is each setting.

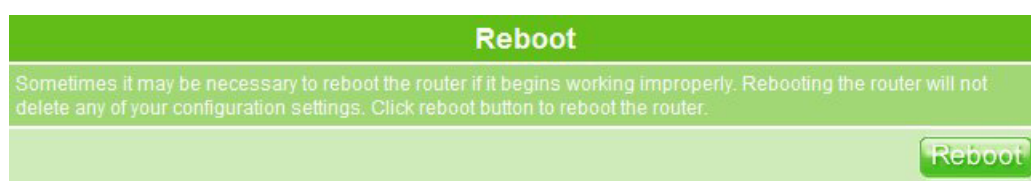


4.5.1 Reboot

If you had entered the wrong configuration while setting up your router or other utilities, you can always reboot your Palm Server Router by this setting.

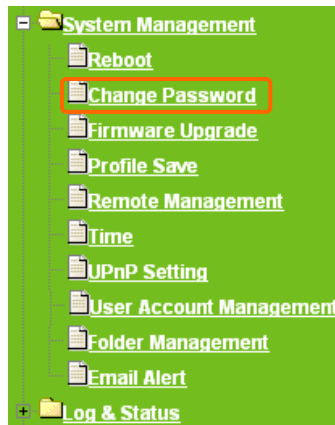


It's necessary to reboot the router if it begins working improperly, please click on Reboot button to reboot the router.



4.5.2 Change Password

At this section, the administrator can change the system password. Only the password can be changed, the username for administrator is “**admin**” and can’t be changed anymore.



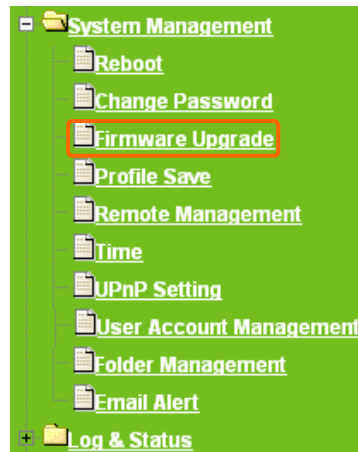
1. **Old Password:** Enter the original password you set.
2. **New Password:** Enter the new password you want to change.
3. **New Password (Confirm):** Enter the new password again for confirming.
4. **Apply & Cancel**

Click on **Apply** button to continue. Click on **Cancel** button to clear the settings on this page.

Change Password	
The router ships with no password. You may set a password or change your current password in this page.	
Login :	admin
Old Password :	<input type="password"/>
New Password :	<input type="password"/>
New Password (Confirm) :	<input type="password"/>
<input type="button" value="Apply"/> <input type="button" value="Cancel"/>	

4.5.3 Firmware Upgrade

You can upgrade the firmware of the Palm Server Router on this page. Make sure the firmware you want to use is on the local hard drive of the computer.



1. **Update Firmware:** Click on Browse button to browse the local hard drive and locate the firmware to be used for update.

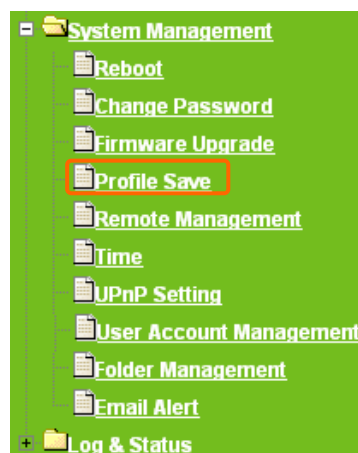
2. OK & Cancel

Click on **OK** button to confirm the setting finish. Click on **Cancel** button to clear the settings on this page.

 A screenshot of a 'Firmware Upgrade' dialog box. The title bar is green and says 'Firmware Upgrade'. Below the title bar, there is a paragraph of text: 'From time to time, the product may release new versions of the router's firmware. You can click Check Firmware button to check and download up-to-date firmware and click Browser button to locate the file from your local harddisk.' Below this text, there are two lines of status information: 'Current Firmware Version : 2.0.5_B04' and 'Firmware Date : 2007/04/18 20:01:19'. Below the status information, there is a label 'Update Firmware :' followed by a text input field and a 'Browse' button. At the bottom right of the dialog box, there are two buttons: 'OK' and 'Cancel'.

4.5.4 Profiles Save

To backup the current configuration setting or load the backup data, also you can restore the Palm Server Router to default setting by this function.

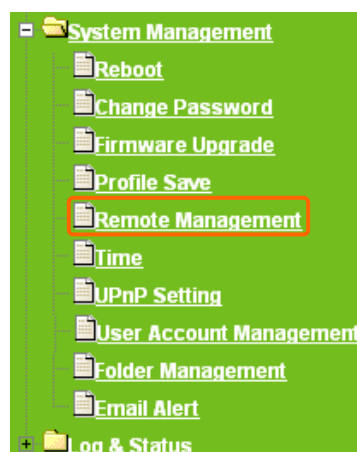


1. **Save Settings To PC:** Click on Save button for saving the configuration setting into assigned location.
2. **Load Settings From PC:** Click on Browse button for searching the saving configuration from hard drive, and then click on Load Button to load all the setting into the router.
3. **Restore To Factory Default Settings:** After you have tried other methods for troubleshooting your network, you may choose to restore the Palm Server Router to the factory default settings.
4. **Apply**
Click on **Apply** button to continue.

Profiles Save	
In this page, you can save your current configuration, restore a previously saved configuration, or restore all of the settings in the router to the factory (default) settings.	
Save Settings To PC :	<input type="button" value="Save"/>
Load Settings From PC :	<input type="text"/> <input type="button" value="Browse"/> <input type="button" value="Load"/>
Restore To Factory Default Settings :	<input type="button" value="Restore"/>
<input type="button" value="Apply"/>	

4.5.5 Remote Management

Remote Management allows the Palm Server Router to be configured from the Internet by a web browser. In general, only a member of your network can browse the built-in web pages to perform “Administrator” tasks. This feature enables you to perform the tasks from the remote (Internet) host.



1. **HTTP Connection Port:** The port number used to access the router.
2. **Remote Management:** You can allow any Internet IP address to access the router, or set up deny rule according to IP setting.
3. **IP Address:** Internet IP address of the computer that has access to the router.
4. **Description:** Enter the description for the remote configuration.
5. **Add, Apply & Cancel**

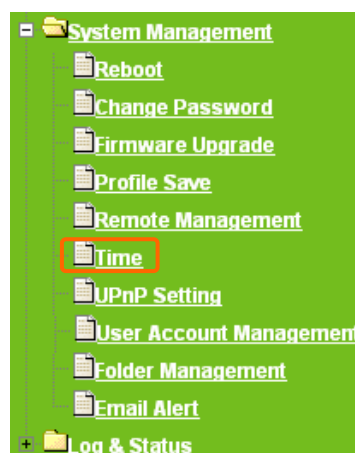
Click on **Add** button to increase the remote rule, click on **Apply** button to continue, or click on **Cancel** button to clean the setting on this page.

Remote Management	
Remote management allows you to make changes to your router's settings from specific IP address in Internet	
HTTP Connection Port :	<input type="text" value="80"/>
Remote Management :	<input type="button" value="Deny All But..."/>
IP Address :	<input type="text" value="."/> <input type="text" value="."/> <input type="text" value="."/> <input type="text" value="."/>
Description :	<input type="text"/>
<input type="button" value="Add"/>	
<input type="button" value="Apply"/> <input type="button" value="Cancel"/>	

Remote Management IP List			
ID	Description	IP Address	Edit/Delete

4.5.6 Time

The System time is the time used by the Palm Server Router for scheduling services. You can manually set the time.



1. **Set the Time:** Select this item to set up time by manual, select the date and time from each drop-down list.

2. **Apply & Cancel**

Click on **Apply** button to continue, or click on **Cancel** button to clear the settings on this page.

Time Server

Please set your time and time zone in this page.

Local Time : 2007/06/21 Thu 10:19:14

☒ **Setup Time Use NTP**

Default NTP Server : time.stdtime.gov.tw (optional)

Time Zone : (GMT+08:00) Beijing, Hong Kong, Singapore, Taipei

Daylight saving time : Disable

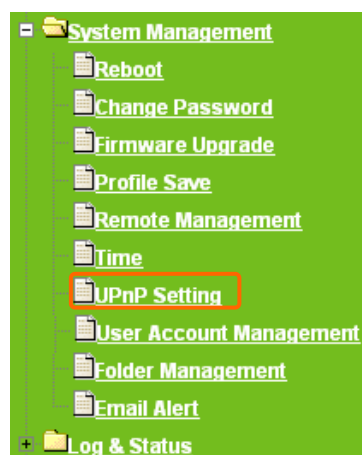
☐ **User Setup**

Set the Time : Year : 2007 Month : Jun Day : 21
Hour : 11 Minute : 19 Second : 50

Apply Cancel

4.5.7 UPnP Setting

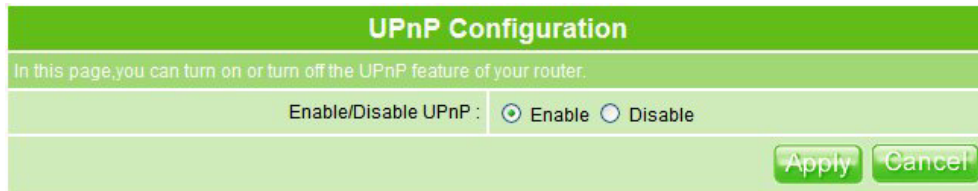
UPnP allows users to connect their UPnP-enabled broadband router, printer server and other devices right to the network with zero-configuration, meaning easier setup for installing the device on the network. The automatic discovery feature enables the device to obtain an IP address, present and describe itself to other devices and PCs on the network without having to install drivers, and then configure and use those devices.



1. **Enable/Disable UPnP:** Select enable to activate this service.

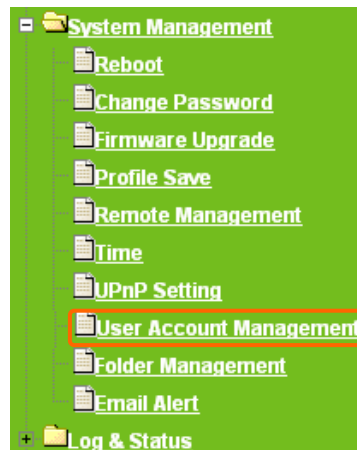
2. **Apply, Cancel & Help**

Click on **Apply** button to add the settings into the list table. Click on **Cancel** button to clear the settings on this page.

The image shows a web form titled "UPnP Configuration". Below the title, there is a text box with the instruction: "In this page, you can turn on or turn off the UPnP feature of your router." Below this, there is a label "Enable/Disable UPnP:" followed by two radio buttons: "Enable" (which is selected) and "Disable". At the bottom right of the form, there are two buttons: "Apply" and "Cancel".

4.5.8 User Account Management

Personal users can use each individual application such as My Status, My Webcam and My Document. This section is to set the user's right. Also, all the users' rights will be showed in User Account List and allowed to edit or delete by clicking the meaning text.



1. **Max Login User:** Set up the maximum users to login at the same time, select the number from drop-down list. If you want to change the maximum login users only without changing user's information, please click on **OK** button after select login user's number.
2. **User Name:** Create the user name in this blank.
3. **Password:** Set up the user's password.
4. **Group Right:** Enable the use to view the webcam's recording files.
5. **User Right:** Allow the user to monitor from webcam or use FTP server.

6. **Activated:** Click **On** to allow the user's right can be applied immediately.

7. Add, Apply & Cancel

After finish above setting, click **Add** button to create the user. Click on **Apply** button to add the settings into the list table. Click on **Cancel** button to clean the setting on this page.

8. User Account List

The list will show you all the user's name, password, status and right.

User Account Management

Max Login User :

10

OK

Create User Account

User Name :

Password :

Group Right :

☐ View Webcam Recorded Files

User Right :

☐ Web Camera Monitor
☐ FTP Server

Activated :

☒ On ☐ Off

Add

Apply

Cancel

User Account List

User Name	Password	Status	Right	Edit/Delete
jacky	****	Active	FTP/Webcam/	Edit /Delete
Trista	****	Active	FTP/Webcam/	Edit /Delete

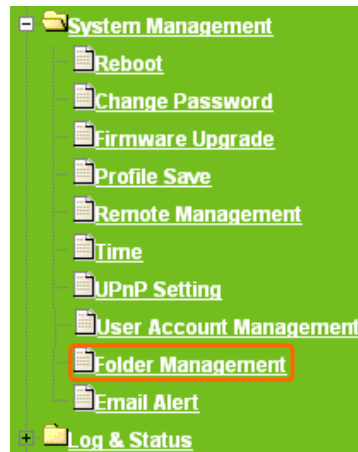
Back

Next

Exit

4.5.9 Folder Management

Easy to check all the USB storage devices connected to your Palm Server Router, view the entire data folder inside each storage devices, and you can manage the disk formatting / partition via click on the button in this page.



1. Select the USB Disk and click on **OK** button for refreshing all disks before you perform disk partition, and the **Unplug** button will appear.
2. To partition/format the disk, please select the disk and click on **Format** button.
3. Moreover, if you want to view the data inside the disk, please go to “**3.5.1 FTP Server Setup**” in page 69 to enable FTP server and then click on “**Disk Explorer**” to view all the disks folder inside the device.

Quick Setup - USB Disk Management

You can specify which USB storage to be System Disk.

USB Device Name

SysDisk	Disk	TYPE	Capacity	Free Space	
<input checked="" type="radio"/>	USB A	FAT16	251 MB	208 MB	Unplug

Disk Explorer OK

Partition / Format SysDisk

All existing data and partitions on the HDD will be DESTROYED ! Make sure you really need to do this !

TYPE ☒ EXT3 ☐ FAT32

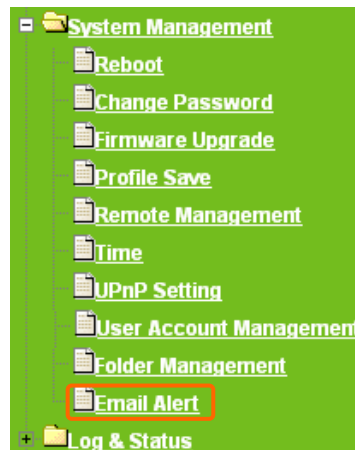
Format

Back Next Exit

Notice: You have to click on “**Unplug**” button before removing the USB devices from the Palm Server Router.

4.5.10 Email Alert

To monitor router activity, you can run on a local PC or a remote one elsewhere on the Internet. And the Palm Server Router provides the email alert facility so that the log messages can be packed as an e-mail for someone who wants to receive these messages. In the following, here explain how to set up the email alert function.



1. **Email Alert:** Check the Enable box to activate the email alert service.
2. **SMTP Server:** Specify an IP address of the SMTP server which can send mails from your Palm Server Router to the recipients' mailboxes directly.
3. **Your Mail (from):** Enter the email address indicated the sending location.
4. **SMTP Auth:** If the email alert needs to be sent via SMTP authentication, please check on this item, and then enter the data into the blanks of account and password.
5. **Account:** Enter the email account which you want to send the alert.
6. **Password:** Enter the email account password which you want to send to.
7. **Email Address (To):** Enter the email address you want to send the alert to.
8. **Schedule:** Arrange to send the alert when event happens or by regular time.

9. Add, Apply & Cancel

After finish above setting, click **Add** button to create the alert rule. Click on **Apply** button to add the settings into the list table. Click on **Cancel** button to clear the settings on this page.

10. Refresh & Delete

Click on Refresh button to renew the screen of login data lists, and click on Delete button to clean all log lists.

Email Alert

Logs can be sent to an email address specified by the user.

Email Alert : ☐ Enabled ☒ Disabled

SMTP Server :

Your Mail (from) :

SMTP Auth : ☐ SMTP Authentication

Account :

Password :

Email Address (To) :

Schedule : ☒ Send when event happens
☐ Send daily at :

Add

Apply Cancel

Email Alert List

SMTP Server	Account	Email Address	Schedule	Edit/Delete
-------------	---------	---------------	----------	-------------

Status & Log - System Log

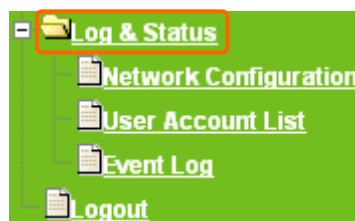
You can view logs of NES Mini Server Router activities. To update the display, click refresh button. To clear the logs, click delete.

Time	Type of Services	Description
07/06/21 10:24:17	WEB	admin Web Logout! (1 times)
07/06/21 10:24:29	WEB	trista Web login Failed! (1 times)
07/06/21 10:24:37	WEB	trista Web login Success! (1 times)
07/06/21 10:25:31	WEB	trista Web Logout! (1 times)
07/06/21 10:25:39	WEB	admin Web login failed! (1 times)
07/06/21 10:25:58	WEB	admin Web login Success! (1 times)

Refresh Delete

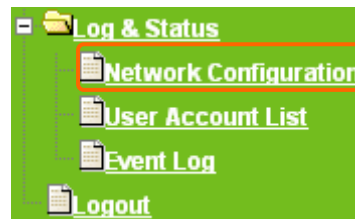
4.6 Log & Status

The Palm Server Router provides the log list and status of connection, user's account.



4.5.9 Network Configuration

Network Configuration shows all the connecting situation of LAN, WAN, Wireless and USB devices plugging.

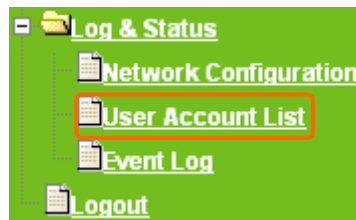


Each block shows configuration status, you may click on Refresh button to update the screen list.

Network Configuration					
Bootup Time:		29:10			
LAN					
MAC Address:		00:0e:68:00:33:d6			
DHCP Server:		192.168.110.1			
Receive bytes:		132988			
Receive packets:		781			
Transmit bytes:		567572			
Transmit packets:		679			
WAN					
MAC Address:		00:d0:68:01:bd:0e			
Mode:		Dynamic IP			
Status:		CONNECTION !			
IP Address:		192.168.1.110			
Subnet Mask:		255.255.255.0			
Default Gateway:		192.168.1.1			
DNS:		server:168.95.192.1 server2:192.168.1.1			
Receive bytes:		257140			
Receive packets:		2725			
Transmit bytes:		3702			
Transmit packets:		17			
				<div><div>Renew</div><div>Release</div></div>	
Wireless					
Status:		AP Mode			
MAC Address:		00:0d:10:25:61:a4			
Mode:		MIX			
SSID:		Palm_Server_Router			
TxRate:		0 B/G			
Channel:		11			
Encrypt Type:		WEP			
Receive bytes:		0			
Receive Packets:		0			
Transmit bytes:		21557			
Transmit packets:		145			
Transmit packets:		145			
USB					
USB Port		USB Type	Name	Model	Status
					<div>Refresh</div>

User Account List

This section shows all users' account right and status.

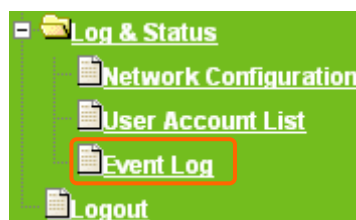


Check the user name, status and opened directory file in this screen.

User Account List		
User Name	Status	Opened Directory / File
jacky	Offline	
Trista	Offline	

Event Log

The Palm Server Router provides system log data for review.

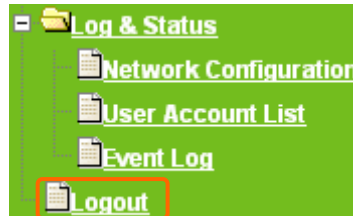


The system log detail list is shown on this screen.

Status & Log - System Log		
This page displays the logs of activities and events for the router.		
Time	Type	Message
07/06/21 10:24:17	WEB	admin Web Logout! (1 times)
07/06/21 10:24:29	WEB	trista Web login Failed! (1 times)
07/06/21 10:24:37	WEB	trista Web login Success! (1 times)
07/06/21 10:25:31	WEB	trista Web Logout! (1 times)
07/06/21 10:25:39	WEB	admin Web login failed! (1 times)
07/06/21 10:25:58	WEB	admin Web login Success! (1 times)
		Refresh

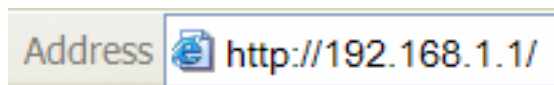
Logout

To logout the router via click on Logout button in Menu, and system will return to Login homepage as shown in page 21.



Personal Configuration

Open a Microsoft Internet Explorer, Mozilla Firefox or Apple Safari browser, and enter <http://192.168.1.1> (Default Gateway) into browser's blank.



Notice: If the homepage doesn't appear, please check if the TCP/IP configuration is obtaining IP address automatically or not. If you don't know how to do, please refer to section "**1.5 Get your IP Automatically & Manually**" on page 11.

Home Page



Click on “**Personal Panel**” and login with your own User Account. (If you don’t have the right to login, please check with administrator for setting.)



Wireless 802.11g
Palm Server Router

Router/AP/Client

Personal Login

Username :

Password :

Login

Screen shows the Personal Control Panel for each right under the setting by administrator.



Palm Server Router provides personal control panel for each user to entrance to each application screen, please click on each icon for application. The icons will be in gray color and can’t be clicked if the user doesn’t have the right to use that function; even there is none of right be set, the user only can apply “**My Status**”.

Notice: The authority depends on administrator’s setting in “**3.6.8 User Account Management Setup**” on page 81.

4.8.1 Personal Control Panel



“My Status” shows all the login information for your personal account.

Click on **“Main Menu”** text to back to Personal Panel and select the other personal application.

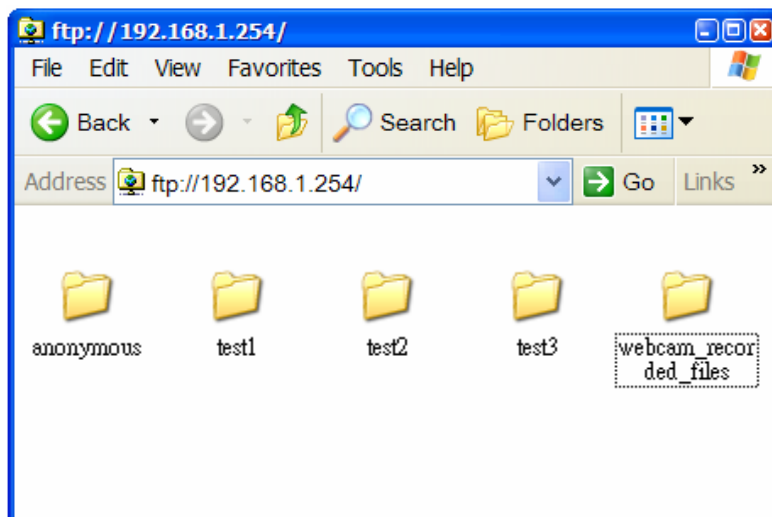
Main Menu		Logout
Activity Information		
Time	Message	
2007/06/21 10:38	Web Logout!	
2007/06/21 10:38	Web Login Success!	
		<input type="button" value="Clear"/> <input type="button" value="Refresh"/>

Notice: All above quota information is based on administrator's setting.



“My Document” will show all the files in the HDD under each user's account. Also can create the folder or copy file into web HD directly. Below description is the detail folder inside.

Click on **“My Document”** and it'll open another web page to show all the files in your own HD.



There will be “**webcam_recorded_files**” and “**Your name**” folder inside your web HD.

- “**webcam_recorded_files**” folder: All webcam images from the Palm Server Router.
- “**Your name**” (here use **test** for example) folder: Each user’s data will be saved into their own folder.



“**My Webcam**” can view the on time image when turn on the web camera.

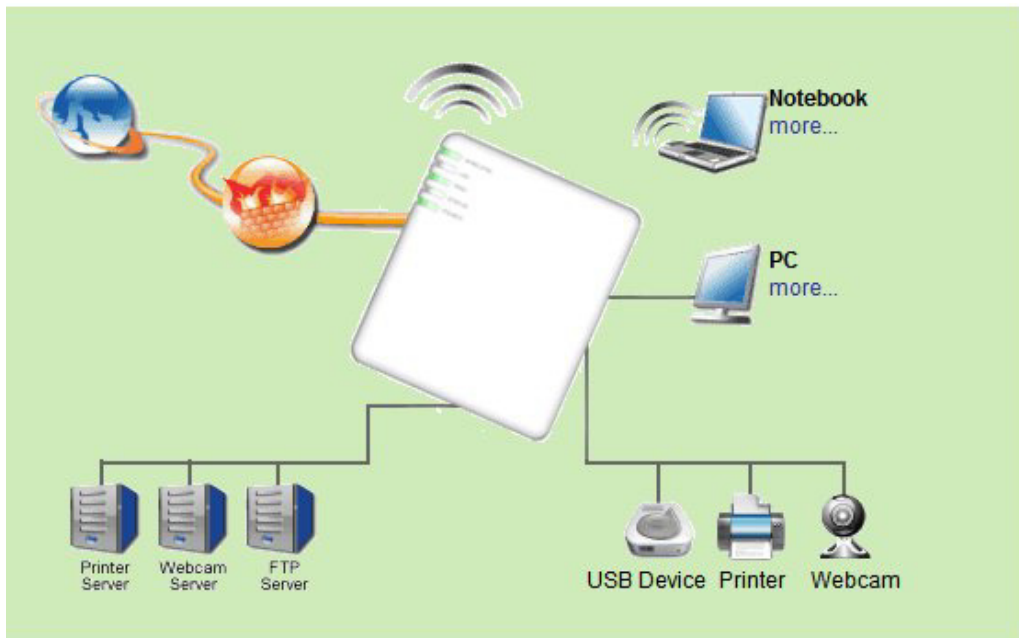
The image can be viewed by “**My Webcam**” as below example image.



Notice: If the image from webcam can’t be viewed, it may be caused by Internet security setting and needs to be corrected or installed with the Java program.

Site Map

The Palm Server Router provides site map clicking for each icon to carry out the setting easily from the home page.



This site is best viewed with IE 5.0 or above.

Chapter 5 Client Mode

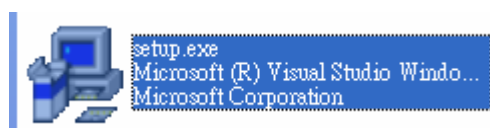
When set in Wireless Client mode, the Palm Server Router allows connection to an existing wireless network by installing complicated driver. The Palm Server Router supports WPA-PSK to secure your wireless data communications.

Plug it into an available Ethernet connection to create an 802.11g wireless network instantly that allows access to single or multiple users with a maximum wireless signal rate of up to 54Mbps.

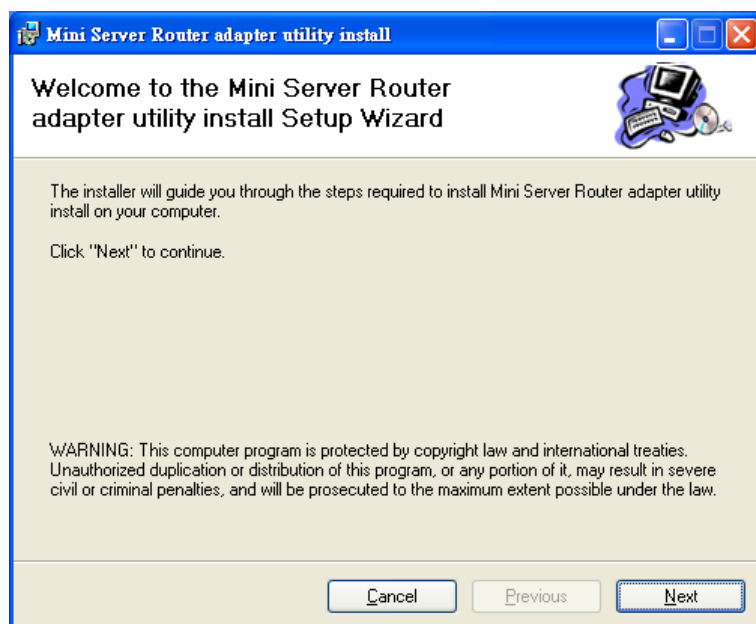
Client Mode Utility Installing Instruction

For using Client Mode, the Utility has to be installed first, and system will indicate each step for your setup. Please follow the steps as follows.

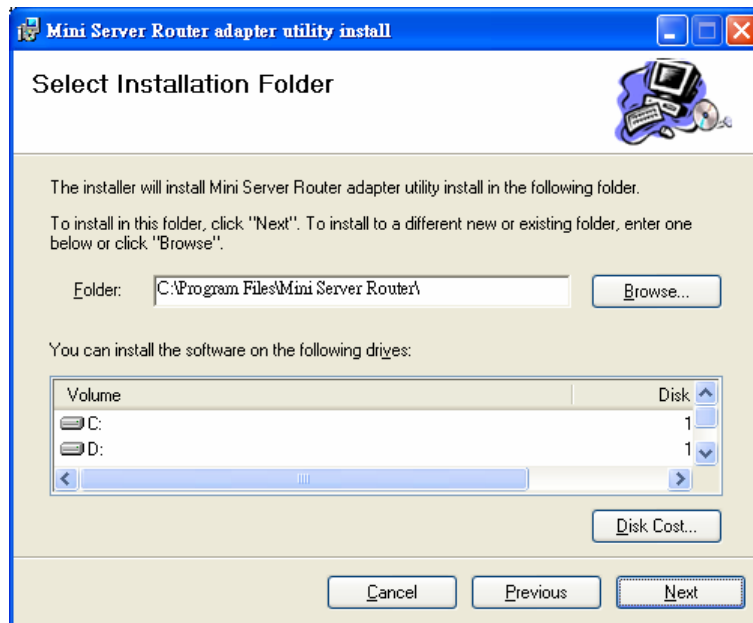
Double click on Palm Server Router's utility program and start to run install procedure.



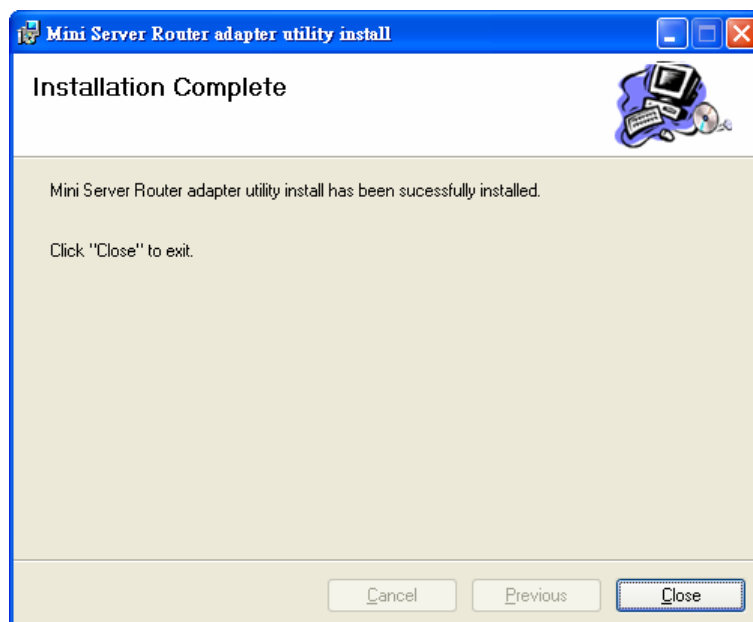
The system will lead you to install the utility program, please click on **Next** button in each page to continue.



Select the folder you want to save the installation program and then click on “**Next**” button until the next screen appears.



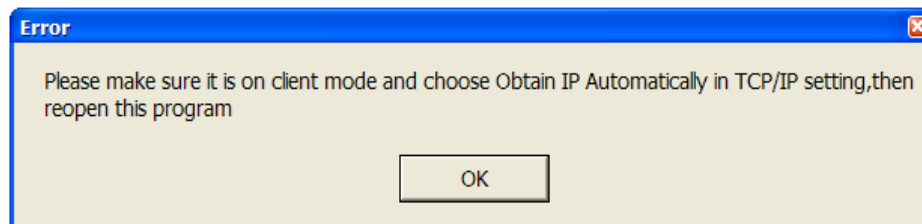
The program has been installed completely when you see the screen below, and then click on “**Close**” button.



Setting up of Client Mode

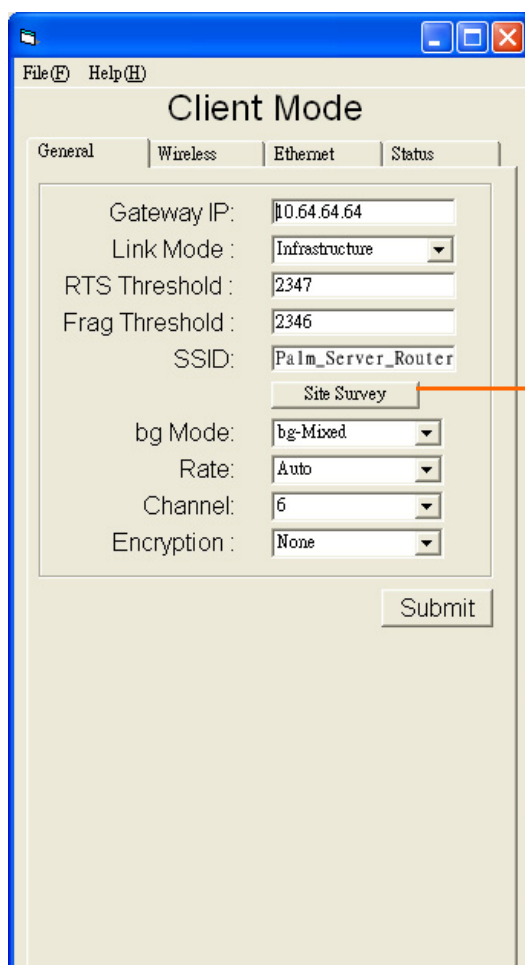
Step 1:

When starting to apply the Client Mode, make sure the slide switch had been moved to “Client Mode”, and your TCP/IP setting is obtaining IP automatically. If that action isn’t completed, the diagram below will appear:



Step 2:

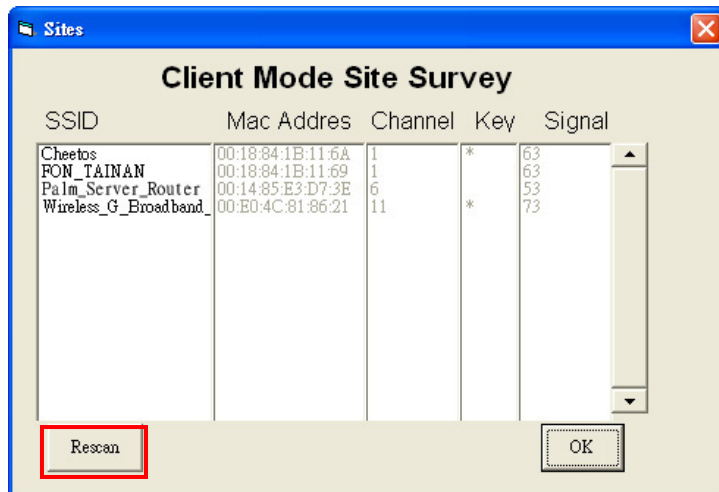
The screen shows the Client Mode page indicating all the connecting information as screen below. Click on **Site Survey**



Click on “Site Survey” for searching the entire wireless signal in your wireless network. Please see next screen as next page.

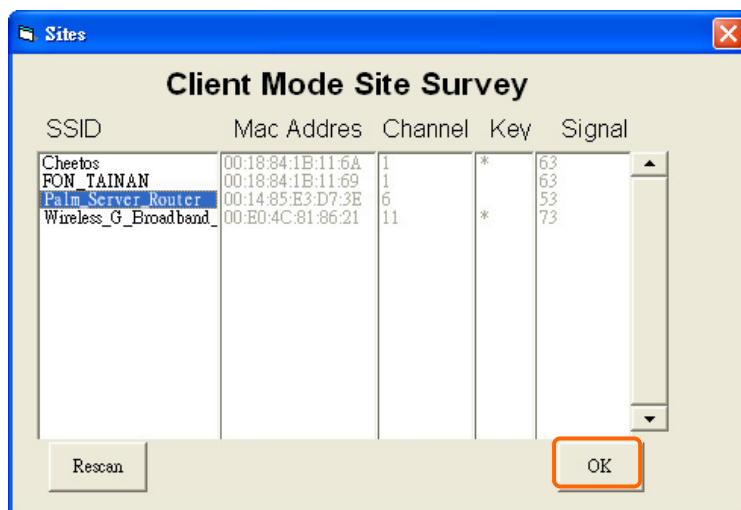
Step 3:

The Site Survey screen will show all the wireless connection signals, you can click on **“Rescan”** to show the SSIDs, and then select the SSID you want to connect.



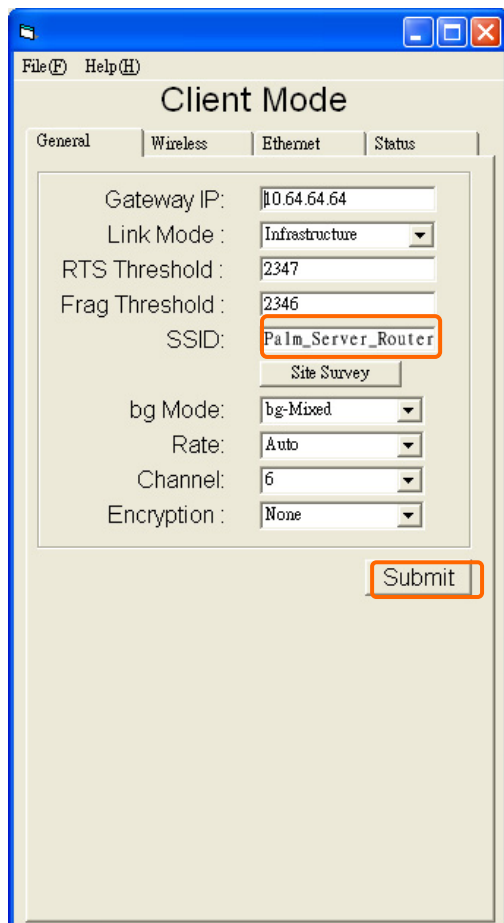
Step 4:

After you select the SSID you want, please click on **“OK”** for connecting (shown as next step).



Step 5:

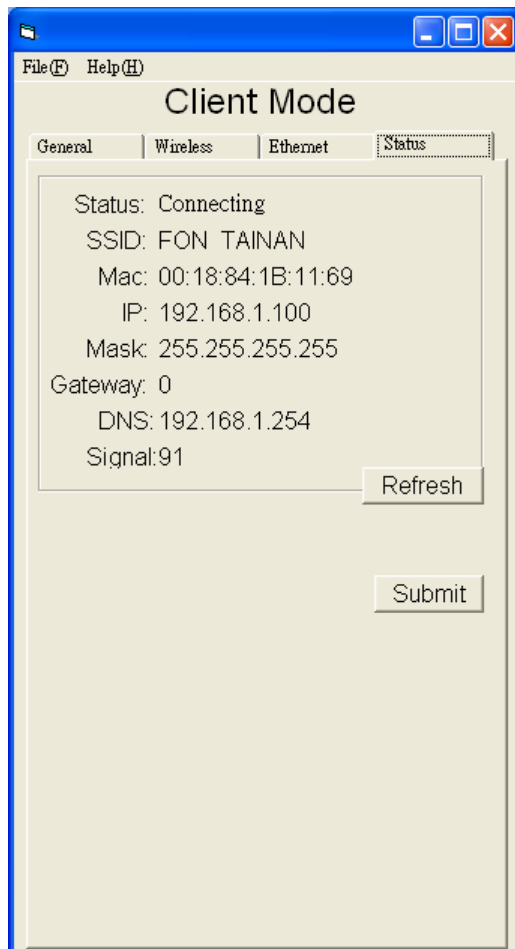
You will see the selected **SSID** which is shown on the screen, and you can click on “**Submit**” for submitting (shown below).



The screenshot shows a 'Client Mode' configuration window with a blue title bar and standard Windows window controls. The window has a menu bar with 'File(F)' and 'Help(H)'. Below the menu bar are four tabs: 'General', 'Wireless', 'Ethernet', and 'Status'. The 'Wireless' tab is currently selected. The main area contains several configuration fields: 'Gateway IP:' with a text box containing '10.64.64.64'; 'Link Mode:' with a dropdown menu showing 'Infrastructure'; 'RTS Threshold:' with a text box containing '2347'; 'Frag Threshold:' with a text box containing '2346'; 'SSID:' with a text box containing 'Palm_Server_Router' (this box is highlighted with an orange rectangle); a 'Site Survey' button; 'bg Mode:' with a dropdown menu showing 'bg-Mixed'; 'Rate:' with a dropdown menu showing 'Auto'; 'Channel:' with a dropdown menu showing '6'; and 'Encryption:' with a dropdown menu showing 'None'. At the bottom right of the window, there is a 'Submit' button, which is also highlighted with an orange rectangle.

Step 6:

You can click on **"Status"** to view the Client Mode connection status after connecting; if the screen doesn't show the status of connecting data, click on **"Refresh"** for renewing the screen. As for the volume of SSID setup; it will be immediately enabled, and the Palm Server Router will also save it as the pre-setup file; even after it's disconnected, and then enabled again; the Palm Server Router can search the pre-setup SSID and connect it; so that the utility won't be used again.



Chapter 6 Advanced Applications

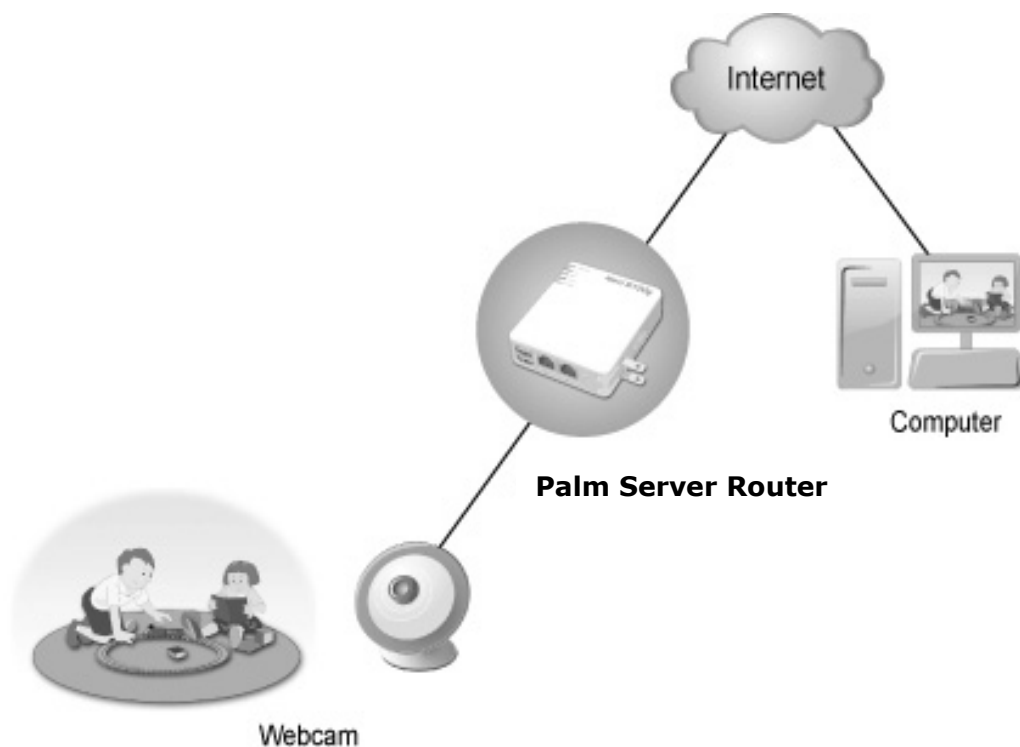
6.1 Application for Web Camera

6.1.1 Web Camera Monitoring application

Monitor your home with a Webcam via Palm Server Router. Take pictures or video via Palm Server Router, also can do the monitoring or recording all images into the USB HDD for reviewing. It works as surveillance tools for home or office security, network Webcams are adopted for more personal matters, such as watching kids and monitoring pets. The Webcam can be remotely accessed and controlled via a browser. Besides, to record and monitor live action with USB webcam, also can view the image through Internet browsers or WiFi mobile phones.

Web Camera Monitoring via WAN Connecting

For viewing the image via webcam from WAN connecting, below is the diagram.



- **How to check your WAN IP address**

To monitor the image via webcam from outside door, you need to know the WAN IP address. Select “**Network Configuration**” under **Log & Status** in main **Menu** after connection, and you will see the WAN IP Address which used to connect to webcam screen. Here use 210.64.134.25 as an example.

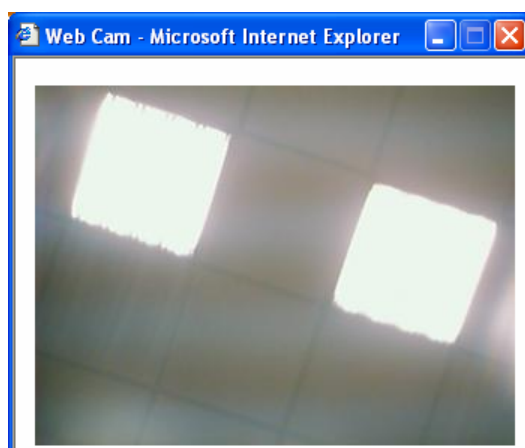


- **Monitor the image via webcam from WAN**

Input the WAN IP Address (as you see in above screen) into browser blanks, and you will see the personal account login screen appear then input your own user account and password. After login by personal, your will see the personal control panel screen as below, please click on “**My Webcam**”.

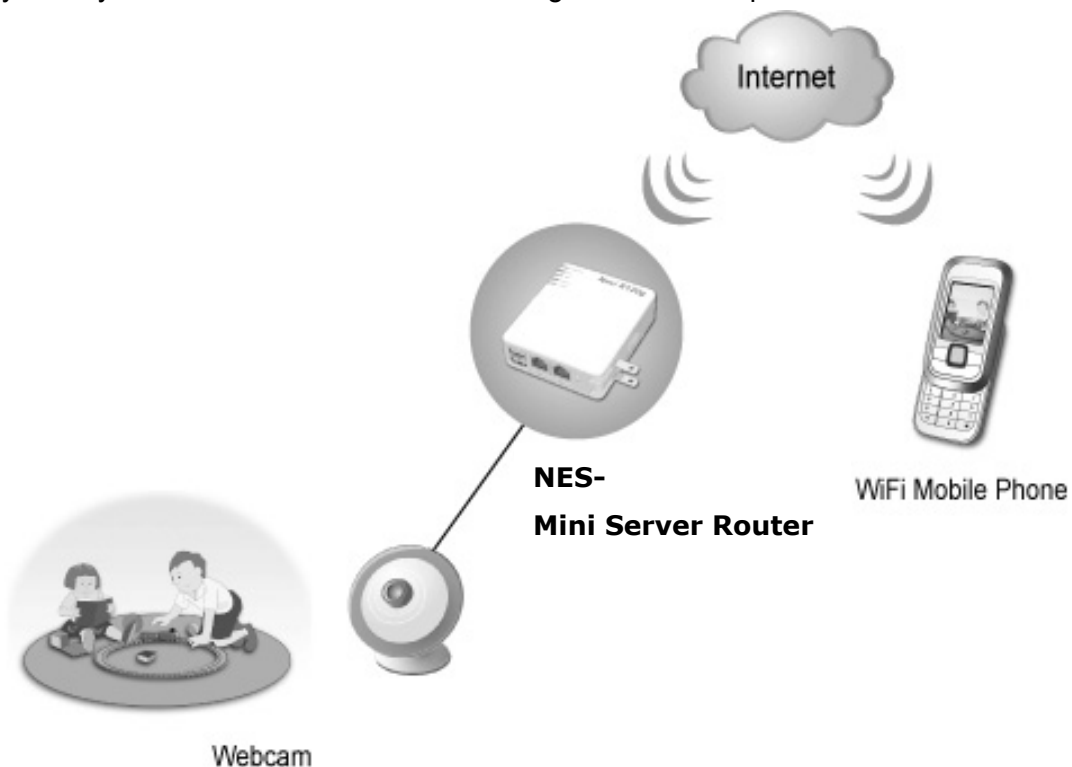


There will pop-up screen shows the image from web camera as example below.



Web Camera Monitoring via WiFi Mobile Phone

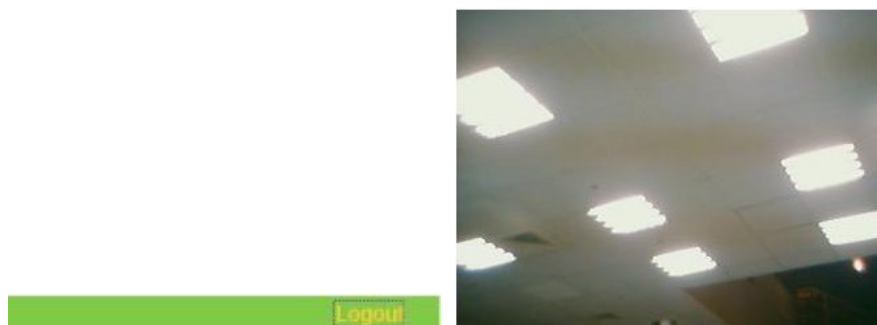
Also, you may view the monitor live action through WiFi mobile phones.



Please fill the WAN IP address plus “/webcam.html” (ex: <http://210.64.134.25/webcam.html>) into the mobile phone’s browser blank and you will see the webcam user login screen appear.



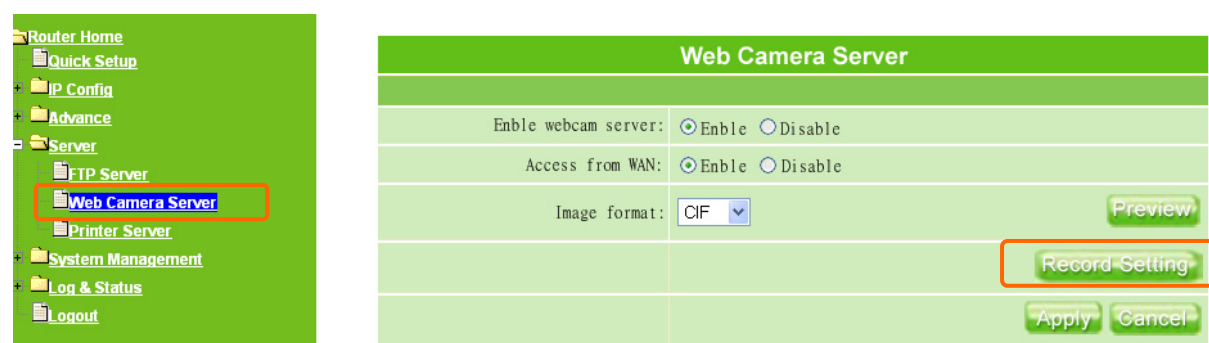
After login by your own account, you will see the monitor image from web camera via WiFi mobile phone.



Web Camera Recording

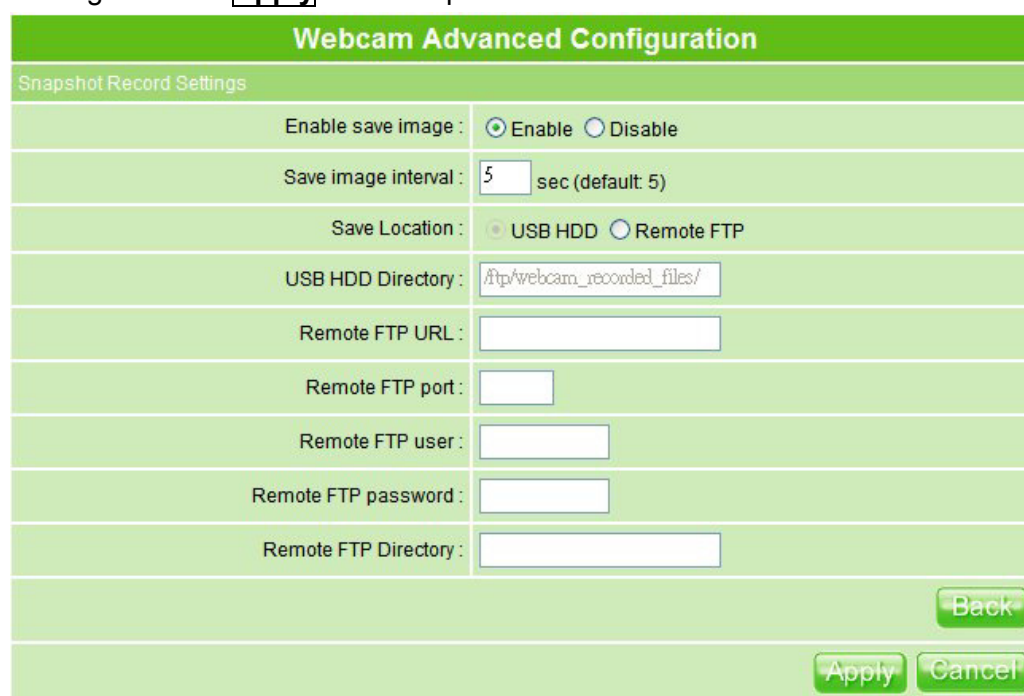
Administrator Setting

Palm Server Router also can record the pictures from Webcam; only **Administrator** can activate the settings. Select **Web Camera Server** from main **Menu** and enable this function, click on **Record Setting** button for further setting.



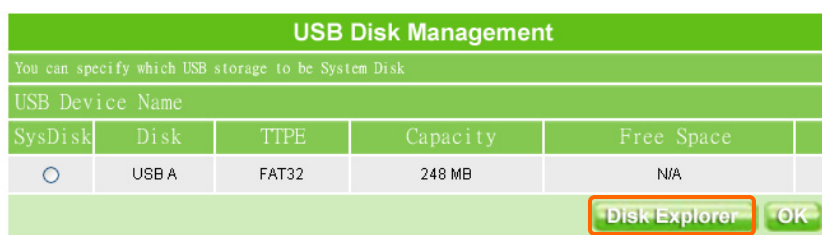
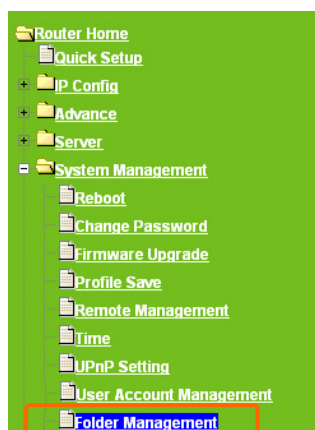
Web Camera Server	
Enable webcam server:	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Access from WAN:	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Image format:	CIF Preview
Record Setting	
Apply Cancel	

To set up the Webcam Advanced Configuration for each text box, the image from webcam will be recorded into your USB HDD or Remote FTP, please refer to User Manual for the detail setting. Click on **Apply** after setup finished.

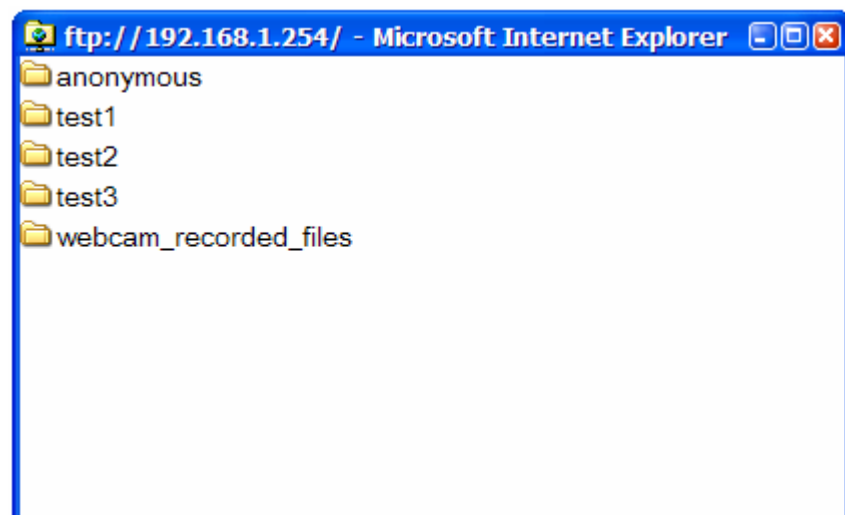


Webcam Advanced Configuration	
Snapshot Record Settings	
Enable save image :	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Save image interval :	5 sec (default: 5)
Save Location :	<input checked="" type="radio"/> USB HDD <input type="radio"/> Remote FTP
USB HDD Directory :	/ftp/webcam_recorded_files/
Remote FTP URL :	
Remote FTP port :	
Remote FTP user :	
Remote FTP password :	
Remote FTP Directory :	
Back	
Apply Cancel	

For administrator, you may view all the images from webcam recording, please select Folder Management and click on **Disk Explorer** to view entire folder inside the disk including webcam record files.



After click on **Disk Explorer**, you will see the folder screen appear including all the folders inside the Palm Server Router. (Below is the example.)



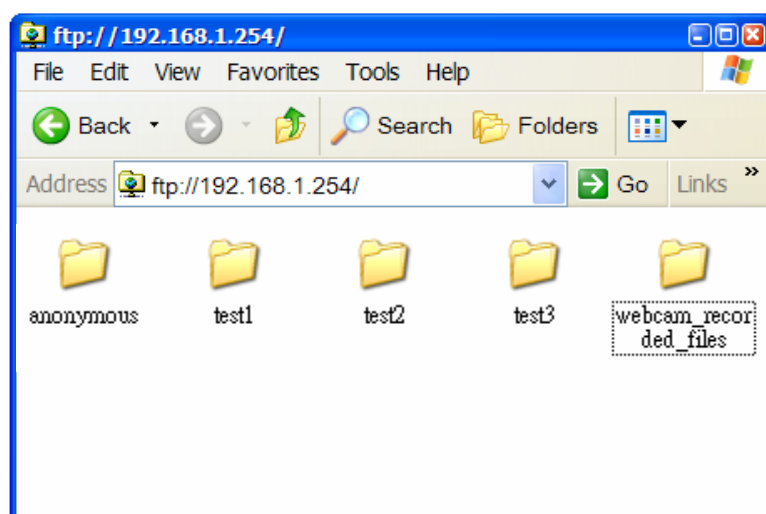
For getting the images from web camera or any files inside router, you may copy the files into your own HDDs directly.

Personal Application

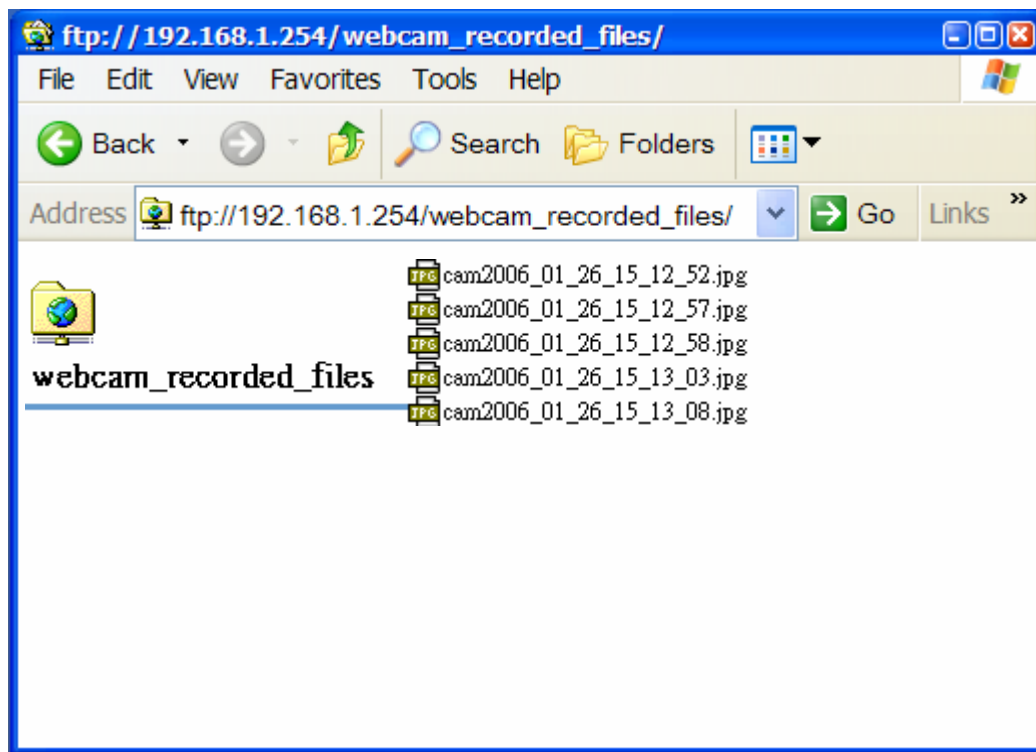
All the users under administrator's setting can view entire webcam recording images from My Document. Please refer to **"1.3.1 Personal Setup Configuration"** to login by your own personal account. For viewing your own folder, please click on **"My Document"**.



After click on **"My Document"**, you will see below folder screen appear under personal account setting.



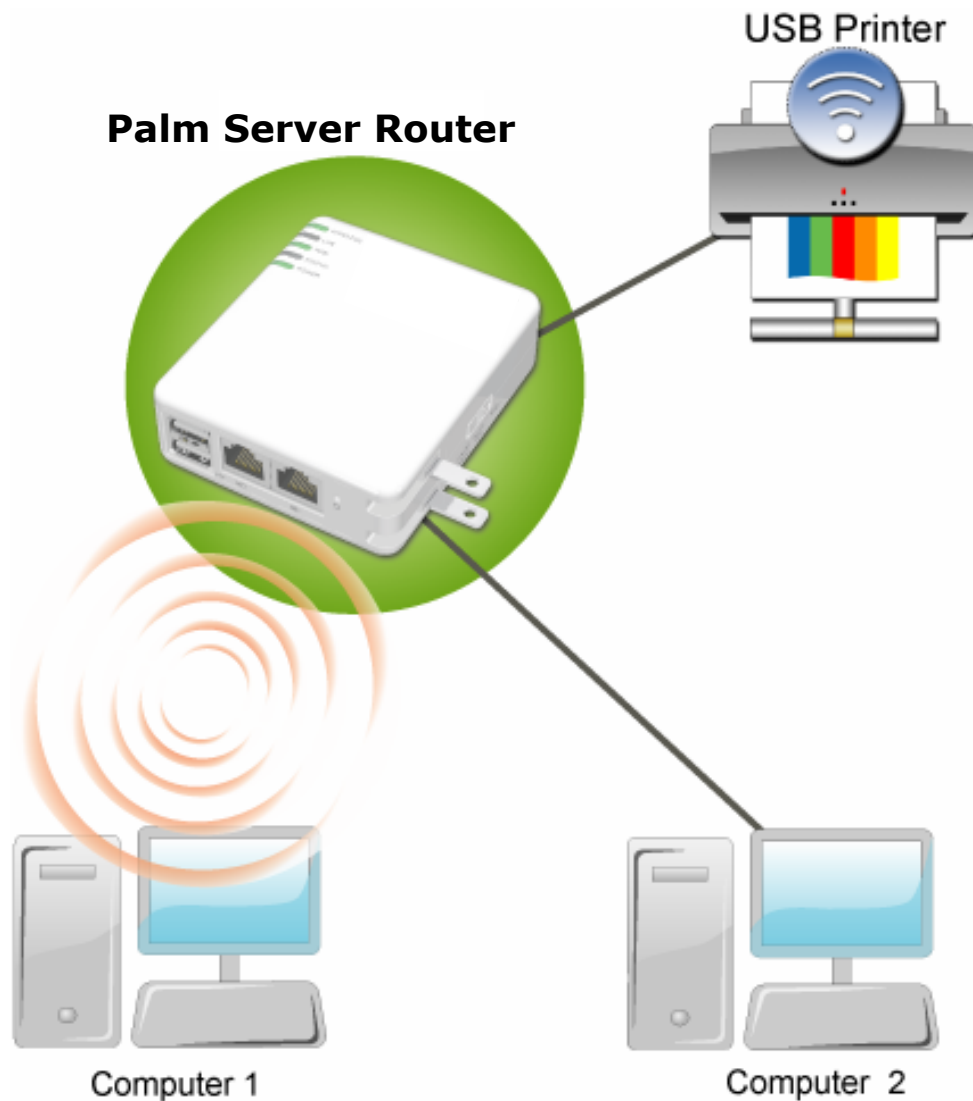
All the image files will be saved into the folder of "webcam_recorded_files", please click into the folder for checking.



Notice: If you can't open the folder inside the FTP server, please check with administrator to set up your FTP & Webcam's access rights.

Application for Printer Server

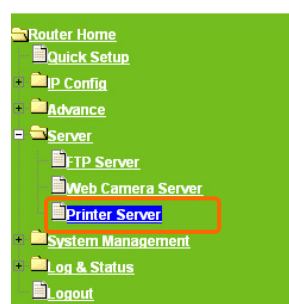
With the Palm Server Router, easy and convenient printer access, this versatile Palm Server Router gives home and office networks built-in efficiency because it allows multiple users to share a printer from anywhere on the same network area without sharing your PCs. With this kind of flexibility, you can place your printer anywhere that's handy. The speedy Palm Server Router boasts a 10/100 Mbps Ethernet connection and supports multiple printing jobs simultaneously. It features an easy, web-based remote management tool and works with most laser and inkjet printers equipped with a USB port.



The detail setting for printer server on the Palm Server Router and PC is as the instructions from next page.

Printer Setting on Palm Server Router

1. Select **Printer Server** under main **Menu** in **Server** area.



Printer Sever Configuration	
Enable Printer Server:	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Enable Printer Access From WAN:	<input checked="" type="radio"/> Enable <input type="radio"/> Disable
Printer Model:	HP Photosmart 2600 series
Printer Name:	1180
Printer Description:	
<input type="button" value="Apply"/> <input type="button" value="Cancel"/>	

It has to be the same with Queue Name.

2. Enable "Printer Server" and "Printer Access from WAN".

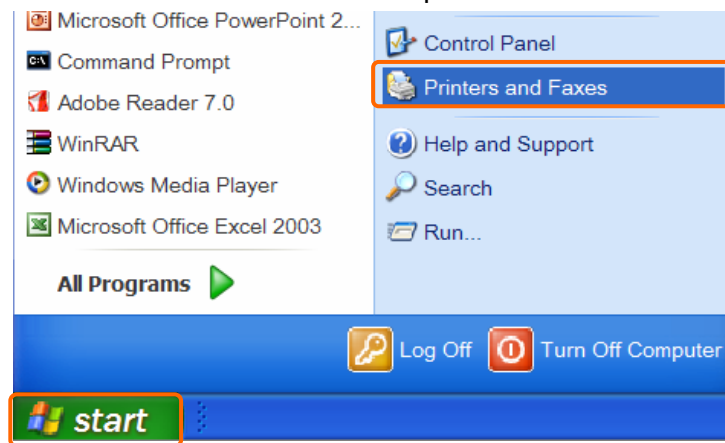
3. Input a name of the printer, **1180** as example which must be the same as set Queue Name.
4. Finally, click on **Apply** button.

Printer Setting on PC

After Enable Printer Server in Quick Setup and Printer Server Configuration, please follow the steps to set the detail **LPR** settings in your PC. (The example below is for Windows XP platform.)

Step 1:

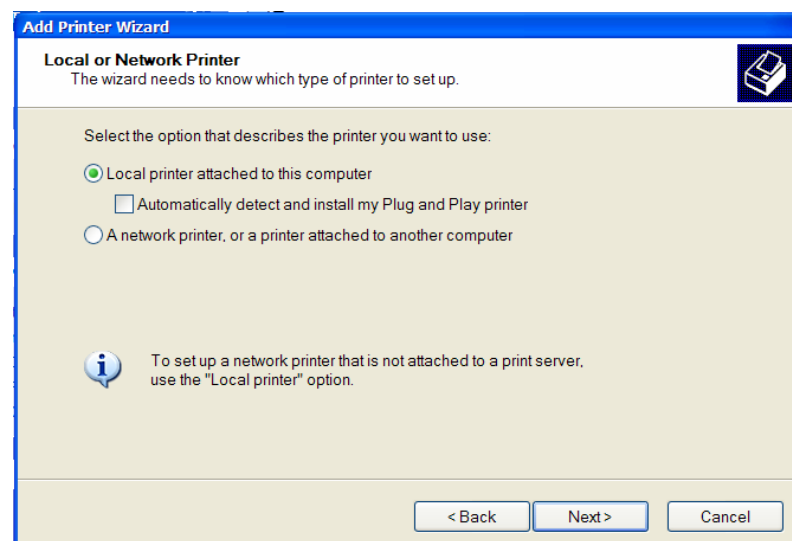
After setting USB printer in Palm Server Router's setting screen, please go to **Start > Printers and Faxes** to add a printer.



Then, please pay attention to the next steps. It points out only the important settings.

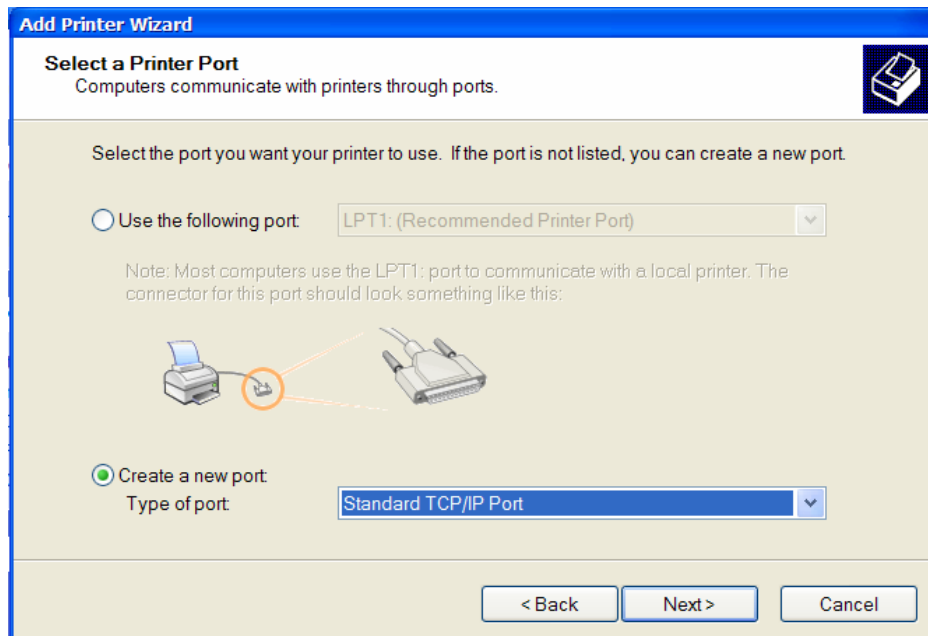
Step 2:

Select **Local printer attached to this computer**, and then click on **Next** button.



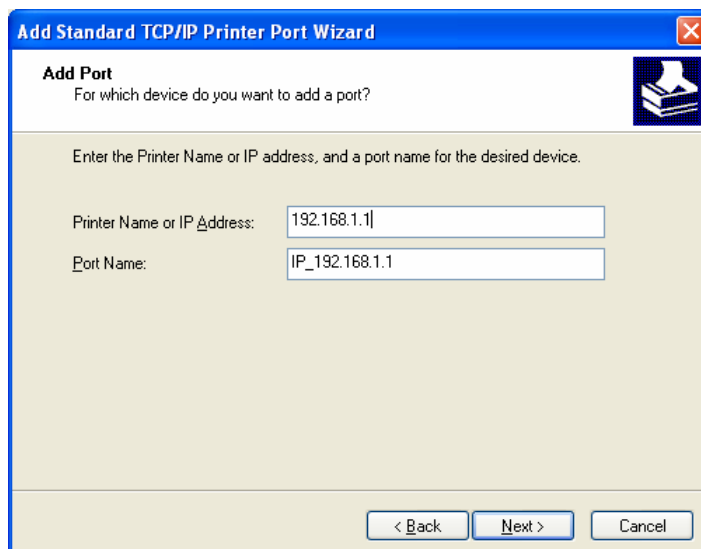
Step 3:

Select **Create a new port** and choose **Standard TCP/IP Port** from drop-down list, and then click on **Next** button.



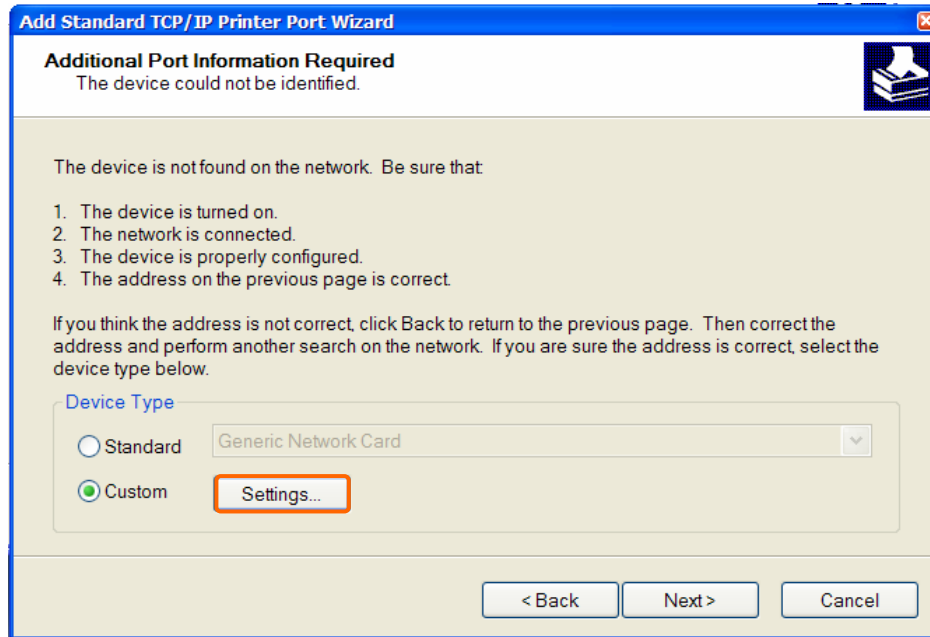
Step 4:

Input your Palm Server Router's address: **192.168.1.1** and click on **Next** button.



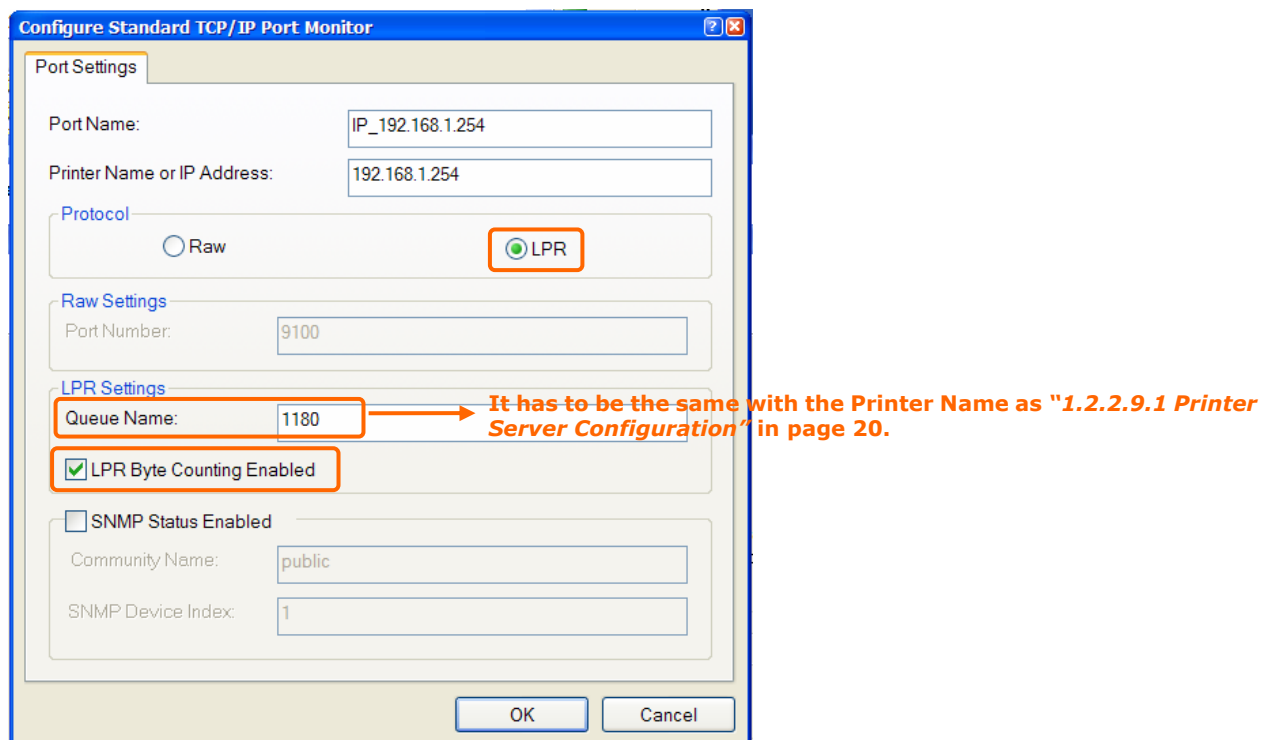
Step 5:

Select **Custom** and click on **Settings...** button to set the detail setting.



Step 6:

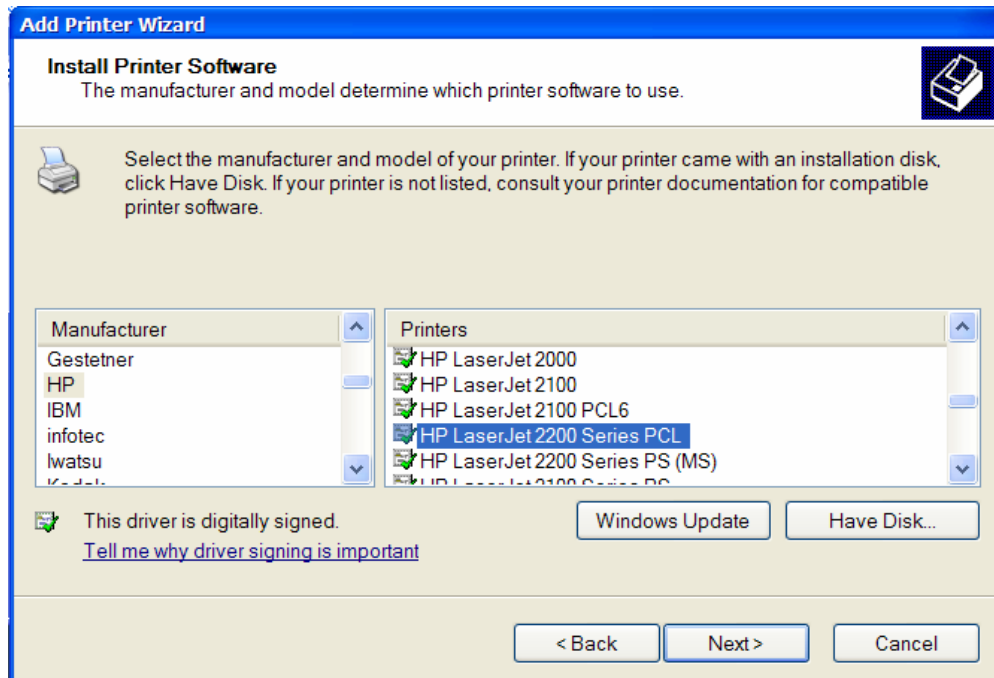
Select **LPR** and give it the same **Queue Name** as USB Printer Name as shown, and mark **LPR Byte Counting Enabled**. Finally, click on **Next** button.



Before click on **Finish** button on the next screen after the aforesaid settings, you have to set the printer's driver as well.

Step 7:

Select the **Manufacturer** and **Printers**. If your printer isn't listed in the table, please install its driver CD and then click on **Have Disk...** button for installation. Or click on **Next** button to finish the setting.



You can name your printer, set it as default printer and share your printer as the next screen shown, the **Printer Server** setting is getting done.

Step 8:

Click on **Finish** button and all steps of setting printer server are completed.

